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International Institute of Information **Technology Bangalore** 



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ANNUAL REPORT 2022-23





# Foreword from the Director







The preceding year marked an extraordinary leap for IIIT-B across the domain of Academics, Research and Innovation particularly, as we successfully navigated the challenges posed by the COVID-19 pandemic which still had its reminiscence at the start of the year. As we stride ahead, leaving these trials behind, this Annual Report encapsulates the remarkable journey of our institution in the year 2022-23.

This edition of the Annual Report holds a distinct significance, as it coincides with the celebratory occasion of IIIT-B's Silver Jubilee. Throughout the yearlong festivities, an extensive array of events unfolded, encompassing research initiatives, workshops, conferences, outreach endeavors, sports spectacles, and a rich tapestry of extracurricular engagements.

Within this academic year, we proudly witnessed the convocation of the largestever cohort of graduates in IIIT-B's history – an impressive assembly of 332 accomplished individuals. Concurrently, our institution fortified its presence on the research landscape, marked by the initiation of novel projects that push the boundaries of innovation. Noteworthy is the multifaceted excellence showcased by our students, not confined solely to academic pursuits, but also extending seamlessly into sports and extracurricular pursuits.

Ourfiscal health has been equally robust, marked by prudent financial management that directs resources towards the institute's enhancement and expansion. The amalgamation of these achievements, milestones, and financial stewardship is meticulously documented in the following pages of this Annual Report.

This report serves as an authentic and transparent chronicle, capturing the essence of the past year in all its clarity and truth. A warm commendation is extended to the dedicated team members who have painstakingly crafted this report, weaving together intricate details, and event narratives into a coherent tapestry.

May the pages that follow offer you a fulfilling and enlightening reading experience.









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# **DIRECTOR'S REPORT**









# Prof Debabrata Das Director, IIIT-B

This Annual Report is special, as it coincides with our momentous **Silver Jubilee year**. On September 18<sup>th</sup>, 2023, we commemorate the 25<sup>th</sup> Birthday of **IIIT-Bangalore**, marking the birth of one of the India's leading educational institutions. We are agile to adopt the changing technology landscape while staying true to our core values of quality education, innovation, holistic development and inclusivity. Our alumni have excelled in diverse fields, nationally and internationally.

The 23<sup>rd</sup> Convocation marked a significant milestone as the **4,237**<sup>th</sup> student of IIIT-B stepped out to **graduate and became alumni**. This year's graduating class was the largest in the history of our institution, with a total of **332** students receiving their well-deserved degrees. Among them, we had 115 graduates from the Integrated Master of Technology program, 174 from the Master of Technology program, 17 from the Master of Science in Digital Society program, 15 from the Master of Science by Research program, and 11 dedicated PhD scholars.

This outstanding batch 2023 achieved remarkable success in national and international hackathons, earning scholarships and internships globally. I shall highlight a few. **Nikitha AN** of the graduating iMTech batch made history as the first student to receive the Google APAC women Techmakers Scholarship. Another set of iMTech graduating students **Sriram**, **Nachiappan**, **Parithimalan**, **Vikram Adithya**, **Arpitha**, **and Prasanna** won the best solution to the problem statement put forward by M.P. Police in the Smart India Hackathon 2022.

Agrim Jain, Akshat Garg, Pranav, and Shivankar reached the final round of DP World's The Big Tech Project, a prestigious hackathon that brings together top innovators from India and the UAE.

Graduating research students, **Abidha VP** secured a post-doctoral fellowship at Hong Kong University of Science and Technology (HKUST), and **Nikhila** is set to become a Research Associate for a collaborative project between the National University of Singapore (NUS) and CNRS France. Multiple graduating students got admission in top universities of world for further higher education.

Three of our graduating Ph.D students won Best Paper awards in renowned international forums -**Oindrilla Matilal** - David B Martin Best paper award in 18<sup>th</sup> European Conference on Computer Supported Cooperative Work, in Germany. **Manpreet Kaur Jaswal** - received Best Paper award at IEEE 24<sup>th</sup> International Conference; and **Nithya Ganesan** - Best Paper award at the 12<sup>th</sup> International Conference on Industrial Technology and Management held at the University of Cambridge in Cambridge, United Kingdom.

MTech and iMTech students, Vinay, Gopala Krishna Reddy, Ravi Kiran, and Ajay Kumar, under the guidance of Prof. Nanditha Rao triumphed with the prestigious first prize at the VLSI Design Conference 2023.

Our institute takes great pride in the remarkable accomplishments of our esteemed faculty members. While our faculty has earned numerous accolades, due to space constraints, I will only highlight a few here. I am **humbled** to share that I have been honored with the prestigious **IETE-Prof SVC Aiya Memorial Research Award** 2022. This recognition was bestowed upon me at the 65<sup>th</sup> Annual General Body function of the Institute of Electronics and Telecommunication Engineers (IETE) for my research and research guidance in the field of Medium Access Control (MAC) protocols for broadband wireless networks.

Prof. TK Srikanth, the PI for IIIT-B's EHRC project Tele-MANAS, has achieved another accolade. The project has reached a significant milestone nationwide by handling one lakh and sixty thousand calls in 8 months through the National Tele-MANAS platform since its launch in October 2022. Prof. Srikanth and his team have played a pivotal role in shaping the program's technical architecture and overseeing technology activities in collaboration with the Ministry of Health, Gol and NIMHANS.

Prof. Srinath Srinivasa received two projects: Indian Data Exchange, from National Security Council, Gol, and another project CADS-CODR (Data Lake Project) from Planning Department, Government of Karnataka.

Prof. Amit Prakash, received a research project grant for Creating a Computational Curriculum for Visually Impaired (VI) students in SEEDS (Scalable Early Education and Digital Scaffolding).

IIIT-B COMET Foundation, Prof. Jyotsna and Dr. Milind Gandhe project on Advanced Communication Systems, from NM-ICPS, DST, Gol, have been developing 5G-Advance ORAN base-station and RIS. The collaborators of this project recently pushed Indian agenda of 6G in ITU.

Dr. Nanditha Rao, received a SERB research project "Vector Processor Design", Dr Priyanka Das, research project "Intelligent reflecting surface for wireless communication" SERB, International Institute of Information Technology Bangalore. Dr Prem Singh, Integrated Circuit for ultra-low power wireless IoT Devices, MeitY, International Institute of Information Technology Bangalore, Prof. Meenakshi D'Souza's expertise and dedication have been recognized Secretary cum Treasurer of the ACM India Council for the past four years. Prof. Meenakshi D'Souza along with Prof. Jaya Sreevalsan Nair have also been selected for grade elevation to ACM Senior Members 2022.

Our institute has achieved a remarkable ranking of **74 out of 1314** engineering colleges in India, moving up **7 ranks** in the prestigious National Institutional Ranking Framework (NIRF). We are the 2<sup>nd</sup> best among all the IIITs (32). This achievement reflects our unwavering commitment to excellence in various areas, such as teaching, learning, resources, research, professional practices, graduation outcomes, facilities for physically challenged students, and perception ranking.

Additionally, IIIT-B was honored with the **Silver Jubilee** Icon Award at the 25<sup>th</sup> edition of Bengaluru Tech Summit, 2022. This prestigious recognition recognizes our institute's significant contributions to the growth and development of Karnataka State, particularly in technology, research, policy, and technical committees.

Centre for **Digital Public Infrastructure (CDPI**), which aims to help scale digital public infrastructure around the world was inaugurated by our Chairman Kris Gopalakrishnan in March this year. The CDPI is currently engaged with multiple countries.

Mr. Bill Gates, Cofounder Microsoft and Gates Foundation visited Modular Open-Source Identity Platform (MOSIP) demo on 4<sup>th</sup> March 2023 in Bangalore. MOSIP is a digital identity platform product developed by IIIT-B for the world (like, Aadhaar for India). He appreciated IIIT-Bangalore's contributions on Digital Identity platform to the world. Five more countries have signed MoU with IIIT-Bangalore in last one year taking a total of **11 countries** now for their National Identity roll out by using MOSIP ID platform.

IIIT-Bangalore has online Continuing Professional Education (CPE) for skill development in niche areas like Data Science, Software Development, Cyber Security, Al&ML. Total 21,887 already graduated. This year 6668 enrolled for CPE program this year. I want to thank my colleague Prof. V Sridhar and CPE team and platform partners.

Over the years Faculty and students have published 1500+ peer reviewed papers, 28 patents and 20+ books and book chapters. **There are 49 on going R&D projects** in the year 2023.

**Internship and Placement**: We have had 100% internship offers with 109 students receiving over Rs. 1 lakh/month as internship stipend. There were 555 internship offers for the graduating batch of 332 and barring a few all the students in the graduating batch have received the FTE offers with an average salary of 30 Lakhs.

**IIIT-B Innovation and Startups:** Institute received funding from TIDE, Gol, Start up India seed fund and Samsung CSR funds for incubation. A total of 96 startups are incubated at IIIT-B, of which 18 are currently being in campus. Our startups were awarded with 1 International and 2 National awards in last one year. Our students Mayank, Rohit, Siva and Asmita have won Start Up competition and garnered funding for their ideas and innovations through MeitY, Govt of India in 2023.

**IIIT-Ba**ngalore mentored Myanmar Institute of Information Technology (MIIT) and completed the project on 30<sup>th</sup> May 2023. This is a project with **MEA**, Gol. In May 2023 Prof. Chandrashekar, Prof. Sinha, Commodore SR Sridhar (Retd), Prof. Raguram, Mr. Vivek Yadav visited MIIT for imparting last set of **FDP**. I want to thank all the faculty members & staff of IIIT-Bangalore those involved in this project and the officials of **MEA** and Rector and faculty of MIIT, **MOST importantly** of Govt of Myanmar for successful completion of this project on 30<sup>th</sup> May 2023.

With cooperation from ELCITA, we have embraced eco-friendly practices, including the installation of a decentralized biogas plant with a capacity of 100kg with a daily yield of 10-11 cubic meters of methane gas for our campus kitchen which in turns saves an approximate **60 cylinders per month.** 

At water conservation front, we have established multiple rain water harvesting units, collectively capable of storing an impressive 3.6 lakh litres of precious water.

We have installed an expansive rooftop solar system with a robust capacity of 500 KVA. This remarkable system now caters to nearly 40% of the institute's energy requirements. It was with great honor that our esteemed Chairman, Mr. Kris Gopalakrishnan, inaugurated this momentous installation.

**Alumni Achievements:** Ms. Vidhya Y, an alumna of IIIT-B, was bestowed with the prestigious National Award for Empowerment of Persons with Disabilities under the esteemed category of Sarvshresth Divyangjan. The honorable President of India, Smt. Droupadi Murmu personally adorned her with this distinguished medal on the occasion of the International Day of Persons with Disabilities.

Ishwar Sridharan of 2002 batch, Co-Founder and COO of Exotel TechCom Ltd., will be receiving Late Shri N Rama Rao Medal as Alumni-Entrepreneur of the year 2023 for his achievements.

Nikita Katyal holds a patent in applied Al for modeling air conditioning systems to optimize electric consumption. Manu Kaushal has been featured in India's top 100 great people manager for 2022-23 by the Great Manager Institute.



# UNVEILING OF SILVER JUBILEE LOGO



Pioneering Excellence in Education, Research & Innovation



# SYMBOLISM AND ESSENCE OF IIIT-B SILVER JUBILEE LOGO



The silver jubilee marks a significant milestone in the institution's history. As part of the celebrating 25 years of existence and achievements, a especial logo was unveiled commemorating the special occasion by creating a distinct visual identity that reflects the institution's journey and accomplishments.

This logo for the silver jubilee year was designed by Mr. Manoj HP, Designer at IIIT-Bangalore which conveys distinctiveness of IIIT-B.

The logo's symbols encapsulate its essence. Opting for an outlined book was an optimal choice, as a book is synonymous with knowledge. The selection of an open book design was deliberate, symbolizing IIIT-B's commitment to transparency and openness. The book within the logo embodies the motto 'Jnanamutthamam,' signifying thea supremacy of knowledge.

The upper orange page symbolizes our budding students. The orange hue reflects their curiosity, enthusiasm to learn, and creative energy. Since students are the primary target audience, the decision was made to position it as the topmost page in the book graphic.

The turquoise blue middle section represents our ever-expanding alumni. This color signifies wisdom, hope, good fortune, and their role as ambassadors. Placing alumni as the middle segment is befitting, as they emerge as accomplished individuals from the student cocoon.

The cobalt blue cover page denotes our faculty and researchers, the 'gurus' who impart knowledge and provide a strong foundation. Cobalt blue represents qualities such as fairness, erudition, responsibility, and benevolence. They are the cover of the book design, uniting all the elements.

The tagline, "Pioneering Excellence in Education, Research & Innovation," was split into two lines for visibility, even in smaller viewports, additional text like 'Silver Jubilee Year' and 'Since 1998' was strategically placed on the left and right sides of the IIIT-B logo, adhering to principles of balance and symmetry.



# **GOVERNING BODY**





# GOVERNING BODY MEMBERS



Mr. S Gopalakrishnan Chairman, Governing Body, Co-Founder, Infosys



Dr. E.V. Ramana Reddy, IAS Additional Chief Secretary, Government of Karnataka



Prof Debabrata Das Director, IIIT-Bangalore



Shri Giridhar Aramane, IAS Secretary MoRTH, Government of India



**Mr. B V Naidu** Chairman, Sagitaur Ventures Pvt. Ltd.



Mr. R Chandrashekhar, IAS (Retd.) Former President, NASSCOM



Mr. I S N Prasad, IAS Additional Chief Secretary, Government of Karnataka



Mr. Gururaj Deshpande Chief Operating Officer, Edge Verve Systems



Mr. K S Viswanathan Vice President (Industry Initiatives), NASSCOM



**Mr. Naresh Shah** Former President, India R&D Hewlett Packard Enterprise



Mr. T K Srirang Senior General Manager, Head Human Resource, ICICI Bank



Mr. Uday Hegde Co-founder & CEO, USEReady



Ms. Kishore Ramisetty Vice President, Data Platforms Group



Mr. Rishikesha T Krishnan Director, Indian Institute Of Management - Bangalore



Cmde SR Sridhar (Retd.) Registrar, IIIT-B -Secretary to the Board and Outreach Head



**GOVERNING BODY MEETINGS** 

 Confirmation of the minutes of 87<sup>th</sup> Governing Body meeting was held on July 04, 2022.

HIGHLIGHTS OF

- The Registrar gave an update on the actions taken.
   The Governing Body took note of the actions taken.
- 3. Appointment of Internal Auditors for FY 2022-23: As per the approval of the 84<sup>th</sup> Governing Body meeting, M/s Maheswari Associates, Chartered Accountants were appointed as Internal Auditors for the financial year 2021-22. It is proposed to reappoint the same firm for the Financial Year 2022-23 with same terms and conditions.
- 4. Appointment of Statutory Auditors for FY 2022-23: As per the approval of the 23<sup>rd</sup> AGM held on 22<sup>nd</sup> September 2021, M/s Rao Associates, Chartered Accountants were appointed as Statutory Auditors for the financial year 2021-22. It was proposed to reappoint the same firm for the Financial Year 2022-23 with same terms and conditions.
- Proposal for write-off: It was proposed to write off from the books of the institute of the provision amounting to Rs. 15,59,145 in the Financial Year 2021-22, as it is satisfied the following conditions as mentioned in write off policy.
- Governing Body was requested to approve the above write off proposal.
- Approval of budget for Silver Jubilee Celebration: The Sub-Committee recommended that the

budget proposal be placed before the Governing Body for approval. The Governing Body is requested to approve the Budget.

- Proposal for extension and addition of more experts to serve on the Faculty Selection and Promotion committee.
- As per the Rules of Recruitment, Assessment and Promotion of Faculty Staff approved by the Governing Body, the composition of the Selection Committee for the post of Professor shall be as follows:
- Director (in the Chair)
- Two nominees of the Governing Body
- Three experts nominated by the Chairperson as Members.
- The composition of the Selection Committee for the posts of Associate Professor and Assistant Professor shall be as follows:
- Director (in the Chair)
- One nominee of the Governing Body
- Three experts nominated by the Chairperson
- One Professor of the Institute, nominated by the Director as members.
- 11. As the Institute was introducing more programmes, and the areas of specializations were widened, it felt necessary to add more members to the panel of experts.

## March 8, 2023 89<sup>th</sup> Meeting of the Governing Body

- Confirmation of the Minutes of 88<sup>th</sup> Governing Body meeting held on September 07 and 13, 2022.
- 2. The Annual Budget for 2023-24 as recommended by the Sub Committee of the Governing Body (Audit and Finance) was presented to the Governing Body members by the Chief Finance Officer (CFO).
- 3. In case of CPE programmes with UPGRAD. Mr. B V Naidu, Chairman, Subcommittee of Governing Body (Finance & Audit) informed that the institute has to take an appropriate decision on existing arrangement of scholarship sharing with the UPGRAD by examining the claim of UPGRAD and their financials.
- 4. The Governing Body approved the following:
- Evaluation of land in terms of value, validation of price and clear titles be done through a land assessing agency.
- A competent legal firm be appointed to conclude the sales proceeds after due diligence in terms of clear title and statutory provisions.
- Dr Ramana Reddy, IAS, Mr. B V Naidu and the Director of IIIT-B be authorized to take forward the process of purchase of land.
- A provision of Rs 11,700 Lakhs for purchase of land at Shikaripalaya and Rs 2500 Lakhs for commencement of construction activities be earmarked.
- The Governing Body approved the increase in pay with effect from 1.04.2023 for the staff and faculty who were on payroll as on 31.03.2022 for the FY 2023-24
- The Summarized observations of Internal Audit for the Half year ended 30<sup>th</sup> September 2022 was taken note of.
- The three-year term of the Deans ended on February 08, 2023. A Committee for selection of new Deans was appointed by the Chairman of the Governing Body.

- 8. A committee constituted by the Director comprising of the following members submitted a guidelines for Faculty Promotion:
- Dr. Jyotsna Bapat, the Dean(Faculty) and the chairperson
- Dr. Madhav Rao
- Dr. Janaki Srinivasan
- Dr. Dinesh Babu
- Dr. Uttam Kumar
- Dr. Pradeesha
- Dr. Shiva Kumar Malapaka.
- The committee was balanced on several aspects -Research Domains, Gender with both Assistant and Associate Professor members. The goal was to be aspirational to help IIIT-B compete among the best universities/institutes.
- 10. The Governing Body approved the commencement of Executive M.Tech (CSE) with effect from July 2023 after obtaining necessary approvals from AICTE.

## July 2, 2023 90<sup>th</sup> Meeting of the Governing Body

- Confirmation of the minutes of 89<sup>th</sup> Governing Body meeting held on March 08, 2023
- 2. Consideration & recommendation of award of
- PhD Degree-11 students
- Master of Science by Research Degree-15 students
- Integrated M Tech degree: -B Tech & M Tech-115 students
- M Tech degree-174 students
- MSc (Digital Society) degree-17 students
- Scholarships and Medals
- The Governing Body accepted the recommendations of the Senate in its 91<sup>st</sup> Senate Meeting held on June 14, 2023 and agreed upon the recommendations of the graduating students.
- The Dean (Academics) gave a detailed presentation on the analysis of the "Class of 2023" batch which was scheduled to graduate on the same day (July 02, 2023).



# SENATE





# **SENATE MEMBERS**



## **CHAIRMAN: Prof Debabrata Das**

## **MEMBERS, EDUCATIONISTS OF REPUTE**

- 1. Prof S S Prabhu
- 2. Dr. Roland Haas
- 3. Prof Kriti Ramamritham
- 4. Prof S Rajagopalan
- 5. Dr. Nachiket Mor
- 6. Mr. S Nagarajan (Senior Industry Technologist)

## **TEACHING MEMBERS**

- 1. Prof R Chandrashekar, Dean (Academics)
- 2. Prof Shrisha Rao, Dean (Faculty)
- 3. Prof Srinath Srinivasa, Dean (R&D)
- 4. Prof Manisha Kulkarni, Dean (Student Affairs)
- 5. Prof G Srinivasaraghavan
- 6. Prof Meenakshi D'Souza
- 7. Prof Amit Prakash
- 8. Prof R Badrinath
- 9. Prof V N Muralidhara
- 10. Prof Jaya Sreevalsan Nair
- 11. Prof B Ashok
- 12. Prof Madhav Rao
- 13. Prof Dinesh Babu Jayagopi
- 14. Prof Janaki Srinivasan
- 15. Prof Preeti Mudliar

- 16. Prof Balaji Parthasarathy
- 17. Prof Jyotsna Bapat
- 18. Prof V Sridhar
- 19. Prof V Ramasubramanian
- 20. Prof Subir Kumar Roy
- 21. Prof B Thangaraju
- 22. Prof Ashish Choudhury
- 23. Prof Sachit Rao
- 24. Prof Bidisha Chaudhuri
- 25. Prof Sujit K Chakrabarti
- 26. Prof T K Srikanth
- 27. Prof Uttam Kumar
- 28. Prof Priyanka Das
- 29. Prof Amit Chattopadhyay
- 30. Prof Shiva Kumar Malapaka
- 31. Prof Nanditha Rao

## **NON-TEACHING MEMBERS**

- 1. Cmde S R Sridhar (Retd) Registrar and Secretary to the Senate
- 2. Ms. Cynthia D'Mello Staff Officer-Deans' office
- 3. Ms. Ramadevi S Librarian
- 4. Mr M K Durai Murugan Systems Manager

# HIGHLIGHTS OF



# 88<sup>th</sup> Senate Meeting October 12, 2022

- Confirmation of the minutes of the 87<sup>th</sup> meeting of Senate
- Consideration and Recommendation of the Student(s) for Award of Master of Science by Research Degree
- A committee constituted by the Chairman, Senate was recommended for special admission to PhD student(s).
- Matters related to Research scholars For consideration and approval of the Senate
- New course proposals for consideration and approval of the Senate
- Change of Course Name and Pre-requisites for CS716

# 89<sup>th</sup> Senate Meeting December 7, 2022

- Consideration and Recommendation of the Student(s) for Award of Master of Science by Research Degree
- Matters related to Research scholars For consideration and approval of the Senate
- Constitution of Curriculum Review Committee for M.Sc. (Digital Society) Programme
- New course proposal titled "Foundations of Distributed Consensus and Block chains" submitted by Prof Ashish Choudhury

# 90<sup>th</sup> Senate Meeting February 8, 2023

- Confirmation of the minutes of the 89<sup>th</sup> meeting of Senate
- The admissions announcement was approved by the Senate
- The Senate approved the matters related to
   Research Scholars
- Discussions on the pros and cons of the proposed W grade. Based on the discussions, it was decided not to go ahead with the proposal. A limited provision to withdraw from a course will continue to be available in the form LATE DROP option.
- The Senate noted the update(s) from the Senate sub-committee for CPE
- Approved the proposed changes to the grade improvement process

## 91<sup>st</sup> Senate Meeting June 14, 2023

- Consideration and Recommendation of the Students for Award of PhD Degree
- Consideration and Recommendation of the Students for Award of Master of Science by Research Degree
- Consideration and Recommendation of the Students for Award of Master of Technology degree
- Consideration and Recommendation of the Students for Award of MSc (Digital Society) degree
- Consideration and Recommendation of the Students for Award of Master of Technology and Bachelor of Technology degrees to Integrated MTech students
- Consideration and Approval for Award of scholarships and Medals
- Consideration and approval of the new course proposal
- Matters related to Research scholars For consideration and approval of the Senate

# 92<sup>nd</sup> Senate Meeting July 17, 2023

- Value Added Learning Programme (VALP) For consideration and approval of the Senate
- Additional Course Enrolment Options for final year students- For consideration and approval of the Senate
- Matters pertaining to Research scholars For consideration and approval of the Senate
- Special admission to PhD program- For consideration and approval of the Senate
- Mattersrelated to Research scholars For consideration
   and approval of the Senate
- CS731 Software Testing- For consideration and approval of the Senate
- Bucketing of Branch Electives for iMTech and M.Tech.
   Programme- For consideration and approval of the Senate





# CONVOCATION







# IIIT-BANGALORE CONFERRED 332 GRADUATES WITH DEGREES DURING 23RD CONVOCATION

The 23<sup>rd</sup> annual convocation of IIIT-Bangalore was unfolded on July 3, 2023 with grandeur on its lush green campus. The event was graced by esteemed Chief Guest, Prof. Rangan Banerjee, Director of IIT Delhi, and the Guest of Honour, Mr. Balajee Sowrirajan, Corporate VP and MD of Samsung Semiconductor India Research. Presiding over the ceremony was Mr. Kris Gopalakrishnan, Chairman of the IIIT-Bangalore Governing Body.



The convocation ceremony marked a significant moment in the students' life as 332 students graduated from the institute, each stepping into a new phase of their lives. The graduating class comprised of the following academic programs:

- Integrated Master of Technology program (115 Graduates)
- Master of Technology program (174 Graduates)
- Master of Science in Digital Society program (17 Graduates)
- Master of Science by Research program (15 Graduates)
- Ph.D program (11 Graduates)



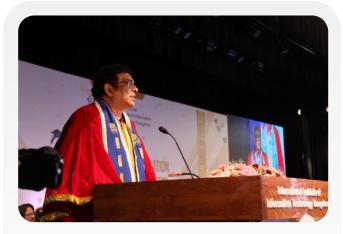


Commending the graduates on their momentous achievement, Prof. Debabrata Das, Director of IIIT-Bangalore expressed the depth of significance in this Convocation, which coincided with the institution's remarkable Silver Jubilee year. He highlighted that September 18<sup>th</sup> would mark the 25<sup>th</sup> anniversary of IIIT-B, symbolizing a quarter-century of excellence in education. With a total of 332 deserving students graduating, this year's class stood as the largest in the institution's history exemplifying the institution's commitment to comprehensive academic offerings.



Prof. Rangan Banerjee sharing his piece of advice to the graduating students, said, "You are indeed fortunate to find yourselves immersed in domains as transformative as AI, ML, and blockchain. At this juncture, our economy is experiencing a remarkable surge, giving us a newfound confidence. The prowess of our IT sector, coupled with groundbreaking achievements like UPI, CoWIN, and Aadhar, serves as a testament to our innovation on the global stage. In this era of innovation and disruption, it might seem like there's little to be concerned about.

However, let us not lose sight of the persistent challenges that continue to afflict humanity – issues of hunger, poverty, healthcare, and security remain unresolved. While we bask in the glory of technological achievements, we must also recognize that we are integral parts of a larger society. Understanding the societal predicaments that prevail is our responsibility. Through thoughtful leadership, we possess the potential to forge a sustainable planet. But this journey necessitates cognizance of the world's dilemmas and a dedication to addressing them. Let us proceed with both enthusiasm and mindfulness, as stewards of progress and champions of societal welfare."



Prof. Balajee Sowrirajan mentioned in his address that remaining inquisitive in the career journey is the key to success and said, "You embody the essence of digital natives, having matured in tandem with the ever-evolving landscape of technology. Embrace the impending technological metamorphosis – Al, ML, big data, and beyond – but infuse ethics seamlessly into your tech pursuits. And amidst the whirlwind of progress, keep your humility intact, remaining firmly rooted in the values that make you who you are. May your journey forward with an unquenchable thirst for knowledge, an indomitable spirit of innovation, and an ever-present sense of humility."



Gopalakrishnan, said, "As Mr. Kris IIIT-B commemorates its 25<sup>th</sup> anniversary, I extend my heartfelt congratulations to you all. This juncture signifies not just a milestone, but the inception of a fresh chapter - a transition from being students to becoming contributors. As we progress, let us collectively construct a society founded on equity and justice, where the principles of fairness and collaboration underpin our actions. The pursuit of a win-win strategy should be our compass, as we strive to uplift those less fortunate and ensure that no one is left behind."

The ceremony's focal point was the celebration of students' accomplishments, underscored by the bestowal of awards and medals. Noteworthy awardees included Ray Jayprakash Dharmnath, who received the Institute Gold Medal for M. Tech, Nipun Goel, honored with the Institute Gold Medal for iMTech, and Vinayak Jha, recipient of the Institute Gold Medal for M.Sc Digital Society. The Late Sri. N. Rama Rao Medal for Student of the Year was bestowed upon Arpitha Malavalli, recognizing her exceptional contributions.

The convocation served as a tribute to the dedication and diligence of these graduates, showcasing their triumphs and the heights they are poised to reach. Through the diversity of academic pursuits and the excellence of achievements, IIIT-Bangalore continues to uphold its reputation as a beacon of outstanding education and accomplishment.



# NIRF RANKING





# NIRF RANKING



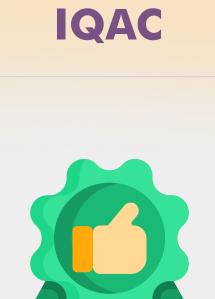
# IIIT-B was Ranked 74 among 1314 Engineering Colleges by NIRF



IIIT-Bangalore achieved a remarkable ranking of 74 out of 1314 engineering colleges in India, moving up 7 ranks in the prestigious National Institutional Ranking Framework (NIRF). IIIT-B stands the 2<sup>nd</sup> best among all the 32 IIITs. The achievement reflected IIIT-B's unwavering commitment to excellence in various areas, such as teaching, learning, resources, research, professional practices, graduation outcomes, facilities for physically challenged students and perception ranking.

IIITB Annual Report 2022-23







# INTERNAL QUALITY ASSURANCE CELL (IQAC)



## **CHAIRPERSON**

Prof Debabrata Das, Director

## COORDINATOR

Prof Chandrashekhar Ramanathan, Dean (Academics)

## **FACULTY MEMBERS**

Prof Srinath Srinivasa, Dean (R&D) Prof Jyotsna Bapat, Dean (Faculty) Prof Madhav Rao, Coordinator (iMTech) Prof Meenakshi DSouza, Coordinator (MS/PHD) Prof V N Muralidhara, Coordinator (MTech) Prof Amit Prakash, Coordinator (Students Affairs) Prof Bidisha Chaudhury, Coordinator (MSc Digital Society) Mr Vivek Yadav, Adjunct Faculty – Alumni

### December 21, 2022

## **KEY HIGHLIGHTS 18TH IQAC MEETING**

- Formation of a Core Team to carry out regular activities and action points of the IQAC
- Formulate a mechanism for data collection
- Submission of AQAR 2021- 2022
- Research Repository for enhancing visibility and citations
- Research Strengthening
- Course List for the next academic Cycle
- Mentoring Sessions
- Awards and Recognition
- Research Methodology
- Additional Hostel Accommodation for students
- Changes to Grade Improvement Process
- Quality of Food in the Food Court
- Improving quality of instructions in classrooms

## **SENIOR STAFF MEMBERS**

Cmde S R Sridhar (Retd), Registrar Mr S Piramanayagam, Chief Finance Officer Mr Jagadish P Patil, Chief Administrative officer

## **INVITED MEMBERS**

Mr. Gururaj Deshpande, Chairperson, ELCITA,
Member of IIIT-B Governing Body
Dr GR Sinha, Adjunct Professor
Ms Cynthia DMello, Staff Officer to Dean
Ms Akshatha, Registrar's Office
Mr Somashekar, Associate Librarian and Archivist
Ms Vandana Bhavanishankar, HR & Process
Administrator

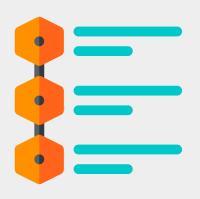
### June 7, 2023

### **KEY HIGHLIGHTS OF 19TH IQAC MEETING**

- Course List for the next academic Cycle
- Mentoring Sessions
- Awards and Recognition
- Research Methodology
- Additional Hostel Accommodation for students
- Changes to Grade Improvement Process
- Quality of Food in the Food Court
- Improving quality of instructions in classrooms
- Roadmap for value added courses, FDP, seminars, research and outreach programs
- 🖝 Data collection mechanism
- Feedback design and review process for syllabus from all the stakeholders
- Strengthening research related metrics
- Initiatives for enhancing visibility and enhancing public perception
- Best Practice ideas for the coming academic year



# **B** DEAN'S LIST





# **DEAN'S LIST - JUNE 2023**



The Dean's List at IIIT-B honors the students of MTech and MSc(DT) who have attained a cumulative GPA of 3.75 or above. The list is updated annually.

#	Roll No	Name	Program
1	DT2021017	Vinayak Jha	Master of Science
2	DT2022007	Kogatam Bharath	Master of Science
3	MT2022073	Polapragada Yashwant	Master of Technology
4	MT2022077	Prarthana U Shanbhag	Master of Technology
5	MT2022504	Banda Anusha	Master of Technology
6	MT2022505	Boreddy Bharath	Master of Technology
7	MT2022514	Rakshit Bhatia	Master of Technology
8	MT2022515	Gogi Reddy Ravikiran Reddy	Master of Technology
9	MT2022521	Tejas B N	Master of Technology
10	MT2022522	R Vinay	Master of Technology
11	MT2022527	Sanampudi Gopala Krishna Reddy	Master of Technology
12	MT2022531	Gandi Ajay Kumar	Master of Technology
13	MT2021017	Ankita Dutta	Master of Technology
14	MT2021026	Soni Ashutosh Kalpesh	Master of Technology
15	MT2021029	Mehta Bhargav Rakeshkumar	Master of Technology
16	MT2021044	Radadiya Divyesh Bharatbhai	Master of Technology
17	MT2021049	Mujumdar Gururaj Pranesh	Master of Technology
18	MT2021054	Himank Jain	Master of Technology
19	MT2021059	Manjaly Jasvin James	Master of Technology
20	MT2021060	Ray Jayprakash Dharmnath	Master of Technology
21	MT2021128	Shree Sharan Garodia	Master of Technology
22	MT2021143	Swaraj Kumar Bhatnagar	Master of Technology
23	MT2021508	Archie Mishra	Master of Technology

The Dean's List at IIIT-B honors the students of Integrated Mtech (iMTech) who have attained a cumulative GPA of 3.60 or above. The list is updated annually.

#	Roll No	Name	Program
1	IMT2018009	Anish Rajan	Integrated Master of Technology
2	IMT2018010	Veluri Aravind	Integrated Master of Technology
3	IMT2018016	Bharath Kumar Joshi	Integrated Master of Technology
4	IMT2018026	Gayathri V	Integrated Master of Technology
5	IMT2018033	Jishnu Vinod Kumar	Integrated Master of Technology
6	IMT2018051	Nikitha A N	Integrated Master of Technology
7	IMT2018052	Nipun Goel	Integrated Master of Technology
8	IMT2018056	Prajwal Agarwal	Integrated Master of Technology
9	IMT2018059	Rohit Katlaa R	Integrated Master of Technology
10	IMT2018060	Sahaj Kuman Vaghasiya	Integrated Master of Technology
11	IMT2018067	Sama Sai Karthik	Integrated Master of Technology
12	IMT2018069	Shashank Reddy Chirra	Integrated Master of Technology
13	IMT2018072	Joshi Soham Mahesh	Integrated Master of Technology
14	IMT2018086	Vinayak Agarwal	Integrated Master of Technology
15	IMT2018504	Arpitha Malavalli Srivathsa	Integrated Master of Technology
16	IMT2018507	Chevuri Hruthik	Integrated Master of Technology
17	IMT2018509	Karthik Hegde	Integrated Master of Technology
18	IMT2018523	Shubhayu Das	Integrated Master of Technology
19	IMT2018527	Tanmay Joshi	Integrated Master of Technology
20	IMT2018529	Veerendra S Devaraddi	Integrated Master of Technology
21	IMT2019001	Abhinav H Kamath	Integrated Master of Technology
22	IMT2019003	Aditya Vardhan	Integrated Master of Technology
23	IMT2019004	Adrij Sharma	Integrated Master of Technology
24	IMT2019010	Ankit Agrawal	Integrated Master of Technology
25	IMT2019012	Archit Sangal	Integrated Master of Technology
26	IMT2019026	Dakannagari Dhamodhar Reddy	Integrated Master of Technology
27	IMT2019028	Divyam Agrawal	Integrated Master of Technology
28	IMT2019030	G Sri Harsha	Integrated Master of Technology

29	IMT2019033	Ghazi Shazan Ahmad	Integrated Master of Technology
30	IMT2019034	Gunin Jain	Integrated Master of Technology
31	IMT2019037	Ishan Uday Shanware	Integrated Master of Technology
32	IMT2019043	Kautuk Raj	Integrated Master of Technology
33	IMT2019048	Lovejeet Singh Parihar	Integrated Master of Technology
34	IMT2019055	Muppuri Siva Jagadesh	Integrated Master of Technology
35	IMT2019057	Nandakishore S Menon	Integrated Master of Technology
36	IMT2019068	Rachapudi Maruthi Sriram	Integrated Master of Technology
37	IMT2019069	Rachna S Kedigehalli	Integrated Master of Technology
38	IMT2019075	Samaksh Dhingra	Integrated Master of Technology
39	IMT2019091	Venkat Suprabath Bitra	Integrated Master of Technology
40	IMT2019092	Bondugula Vignesh	Integrated Master of Technology
41	IMT2019097	Komma Yashovardhan Reddy	Integrated Master of Technology
42	IMT2019525	Vijay Jaisankar	Integrated Master of Technology
43	IMT2020004	Sooraj Sathish	Integrated Master of Technology
44	IMT2020014	Chinchwadkar Netradeepak Manoj	Integrated Master of Technology
45	IMT2020015	Pawar Pushkar Sandip	Integrated Master of Technology
46	IMT2020018	Rachit Agrawal	Integrated Master of Technology
47	IMT2020024	Pavan Thanay Muthyala	Integrated Master of Technology
48	IMT2020025	Chaudhari Aniruddha Shailesh	Integrated Master of Technology
49	IMT2020032	Harne Sarthak Sanjay	Integrated Master of Technology
50	IMT2020039	Anshul Jindal	Integrated Master of Technology
51	IMT2020051	Naitiksinh Solanki	Integrated Master of Technology
52	IMT2020053	Chaitanya Manas Cheedella	Integrated Master of Technology
53	IMT2020056	Rudransh Dixit	Integrated Master of Technology
54	IMT2020069	Chinmay Pankaj Parekh	Integrated Master of Technology
55	IMT2020072	Badam Teja Venkata Sumanth	Integrated Master of Technology
56	IMT2020073	Gatreddi Ashish	Integrated Master of Technology
57	IMT2020081	Arin Awasthi	Integrated Master of Technology
58	IMT2020084	Kondawar Arya	Integrated Master of Technology
59	IMT2020094	Riddhi Chatterjee	Integrated Master of Technology
60	IMT2020102	Tejdeep Gutta	Integrated Master of Technology
-			

61	IMT2020109	Chinthan Chandra	Integrated Master of Technology
62	IMT2020501	Shreyansh Rajeeva Rai	Integrated Master of Technology
63	IMT2020502	Monjoy Narayan Choudhury	Integrated Master of Technology
64	IMT2020509	Hardik Khandelwal	Integrated Master of Technology
65	IMT2020535	Venneti Shreeya Manasvi	Integrated Master of Technology
66	IMT2020548	Tejas Sharma	Integrated Master of Technology
67	IMT2021009	Madhav Sood	Integrated Master of Technology
68	IMT2021011	Deepkumar Patel	Integrated Master of Technology
69	IMT2021016	Harsh Kumar	Integrated Master of Technology
70	IMT2021019	Siddharth Kothari	Integrated Master of Technology
71	IMT2021022	Subhajeet Lahiri	Integrated Master of Technology
72	IMT2021028	Sankalp Kothari	Integrated Master of Technology
73	IMT2021037	Handa Neil Jeetendra	Integrated Master of Technology
74	IMT2021040	Vikas Kalyanapuram	Integrated Master of Technology
75	IMT2021046	Siddharth Chauhan	Integrated Master of Technology
76	IMT2021048	Chavan Suyash Ajit	Integrated Master of Technology
77	IMT2021055	Vidhish Trivedi	Integrated Master of Technology
78	IMT2021058	M Srinivasan	Integrated Master of Technology
79	IMT2021062	Kushal Partani	Integrated Master of Technology
80	IMT2021101	Sai Madhavan G	Integrated Master of Technology
81	IMT2021103	Shlok Agrawal	Integrated Master of Technology
82	IMT2022001	Siddharth Menon	Integrated Master of Technology
83	IMT2022003	Ritish Shrirao	Integrated Master of Technology
84	IMT2022010	Divyam Sareen	Integrated Master of Technology
85	IMT2022017	Prateek Rath	Integrated Master of Technology
86	IMT2022018	Swetha Murali	Integrated Master of Technology
87	IMT2022027	Manda Kausthubh	Integrated Master of Technology
88	IMT2022028	Nikita Kiran	Integrated Master of Technology
89	IMT2022029	Metlapalli Ragini	Integrated Master of Technology
90	IMT2022030	Hemant Gupta	Integrated Master of Technology
91	IMT2022031	Maramreddy Siddharth Reddy	Integrated Master of Technology

92	IMT2022038	Aaryan Ajith Dev	Integrated Master of Technology
93	IMT2022042	Sai Venkata Sohith Gutta	Integrated Master of Technology
94	IMT2022050	Shiven Phogat	Integrated Master of Technology
95	IMT2022055	Harsh Modani	Integrated Master of Technology
96	IMT2022057	Kushal Suvan Jenamani	Integrated Master of Technology
97	IMT2022064	Praveen Peter Jay	Integrated Master of Technology
98	IMT2022075	Aditya Priyadarshi	Integrated Master of Technology
99	IMT2022076	Naik Mohit Avinash	Integrated Master of Technology
100	IMT2022080	Siddhesh Deshpande	Integrated Master of Technology
101	IMT2022082	Sathvik S Rao	Integrated Master of Technology
102	IMT2022086	Ananthakrishna K	Integrated Master of Technology
103	IMT2022089	Aayush Bhargav	Integrated Master of Technology
104	IMT2022097	Patel Krish Shaileshkumar	Integrated Master of Technology
105	IMT2022115	Dave Kandarp Samir	Integrated Master of Technology
106	IMT2022118	Shashwat Chaturvedi	Integrated Master of Technology
107	IMT2022507	Vishruth Vijay	Integrated Master of Technology
108	IMT2022523	Dyuthi Vivek	Integrated Master of Technology
109	IMT2022107	Shashank Siddappa Devarmani	Integrated Master of Technology
110	IMT2019514	Phani Sriram Vadali	Integrated Master of Technology
111	IMT2019529	Raghava S N	Integrated Master of Technology
112	IMT2020512	Aakash Khot	Integrated Master of Technology
113	IMT2020523	Kedar Yogesh Deshpande	Integrated Master of Technology
114	IMT2020554	Anshul Akhilesh Madurwar	Integrated Master of Technology
115	IMT2020561	Ishaan Sanjay Jalan	Integrated Master of Technology
116	IMT2021524	Barath S Narayan	Integrated Master of Technology
117	IMT2021530	Akash Perla	Integrated Master of Technology
118	IMT2022521	Sarvesh Kumar A	Integrated Master of Technology
119	IMT2022546	Ayush Gupta	Integrated Master of Technology
120	IMT2022570	Mupparapu Koushik	Integrated Master of Technology
121	IMT2022571	Sasi Snigdha Yadavalli	Integrated Master of Technology
122	IMT2022587	Swaroop A Ram Rayala	Integrated Master of Technology



# **EVENTS & HAPPENINGS**





# **EVENTS**



### August 24

## **Onam Celebrations at IIIT-Bangalore**

On August 24, the Onam festival fervor was set in at the campus. The décor, pookkalam (flower rangoli), fun activities such as Uriyadi (pot breaking), vadamvali (tug-of-war), Oonjaalaattom (swing) and Sundhariku Pottuthodal (affixing bindis by a blindfolded player on the drawing of lady's face) added the festive mood of Onam at IIIT-Bangalore. Vadamvali was played with great enthusiasm by the campus community, students' group danced to the beats of Shinkari melam.





# August 26 SPIC MACAY Sur Sandhya



Hindustani classical music performance by renowned artists, Pandit Shri Ritesh Mishra and Pandit Shri Rajneesh Mishra was held in association with SPIC MACAY.

# September 5

## **Teachers' Day**

India celebrates Teachers' Day as a mark of respect to the contributions made by teachers to the society in remembrance of Dr. Sarvepalli Radhakrishnan



birthday on September 5<sup>th</sup>. Dr. S. Radhakrishnan who was a staunch believer of education was a great teacher, and a well-known philosopher, diplomat, scholar and the President of India. Students at IIIT-Bangalore too celebrated Teachers' Day,expressing their gratitude and appreciation for their beloved professors.

### September 6-21

# FDP for Faculty of Myanmar Institute of Information Technology (MIIT)



MIIT Mandalay, Myanmar with the support of Ministry of External Affairs (MEA), Govt. of India, coordinated with IIIT-Bangalore and conducted a two-week online Faculty Development Programs (FDPs) to its Faculty on Analog, Digital and Wireless Communications. Prof. Jyotsna Bapat, Dean (Faculty), IIIT-Bangalore took lead in organizing and coordinating the FDP during September 6-21, 2022.

Prof. Debabrata Das, Director IIIT-B inaugurated the program with his opening remarks and inaugural speech. Prof. Chandrashekar Ramanathan, Dean (Academics) expressed his views on importance of the FDP and assessment of teaching-learning process. Prof. Jyotsna Bapat explicitly conveyed her thoughts on outline and structure of the FDP. Dr. Daw Win Aye, Rector of MIIT also shared her views and expressed her sincere gratitude to IIIT-B for all the support, guidance and mentoring.

Highlights of FDP:

- Prof. Priyanka Das delivered sessions on Modulation, Demodulation and Frequency Conversation for 3 days.
- Technical session on Multiplexing was handled by Prof. G. R. Sinha.
- Prof. Prem Singh conducted a 3-day lecture sessions on Cellular Communication, CDMA, and Spread Spectrum Analysis.
- Prof. Jyotsna Bapat guided the participants with her lecture sessions on Software Defined Radio (SDR) and Smart Antenna.

Based on the requests by MIIT Faculty, the twoweek FDP was organized and conducted in online mode covering the Communication systems topics. The concluding session managed by Prof. G. R. Sinha elicited feedback and comments from the participants on FDP.

#### September 8

# Special Interest Group (SIG) Automotive Workshop at IIIT-B



SIG Automotive hosted a workshop on Automotive Software and Sustainability, bringing together leading players from industry and academia on a single platform to exchange ideas and thoughts on the above topics. The workshop, hosted at International Institute of Information Technology (IIIT-B), focused on software, E/E, e-mobility and sustainability, with presentations and panel discussions on a range of topics veering around software and sustainability. The workshop was jointly organized by Prof. Roland Erik Haas and Prof. Sujit Kumar Chakrabarti, both of whom lead the SIG Automotive at IIIT-B. The workshop was attended by more than 90 participants from several organisations, including Daimler, Ashok Leyland and Mathworks.

# September 10 TEDxIIIT-Bangalore



IIIT-Bangalore organised the 5<sup>th</sup> iteration of TEDxIIIT-Bangalore at IIIT-B campus. This year's theme was "Winds of Change". The event was successful with interesting talks by the following eminent speakers:

- Tulsi Tanti, Founder, Chairman and Managing Director of Suzlon Group
- GV Ramanjaneyulu, Executive Director at Centre for SUSTAINABLE AGRICULTURE
- Tapesh Kumar, Pilot/YouTuber
- Zoya Agarwal, Pilot/Spokesperson at UN Women
- Jaishree Sharad, Celebrity Dermatologist, Head of several international Dermatology Associations
- Gaurav Juyal, Host, Art attack India
- Neelakantha Bhanu Prakash, Fastest Human Calculator
- Nidhi Nigam, Founder of Nutrify

## September 18 IIIT-Bangalore Entered Silver Jubilee Year



IIIT-Bangalore celebrated Foundation Day as it entered the silver jubilee year. It was on September 18, 1998 the institute was officially registered with the Karnataka Registrar of Society and thus was born India's premier institution which was envisioned to play an important role in IT education in India. To mark this day, the celebrations were held at the institute auditorium. The event started with an invocation by our PhD student, Kartika and lamp lighting by our Director, Deans, Registrar and Students all key officials of IIIT-Bangalore. Prof. Debabrata Das, Director of IIIT-B, took us all on a nostalgic journey, as he shared the remarkable evolution of IIIT-Bangalore from its conceptual stage to the full-fledged implementation phase.

#### September 18

# Felicitation Ceremony for Classes of 2020, 2021, 2022



Felicitation ceremony was held on September 18, 2022 for Class of 2020 and Class of 2021 as the graduates of these two batches missed their graduation ceremony due to the pandemic and also Class 2022 graduates who could not attend 22<sup>nd</sup> IIIT-B Convocation were also felicitated during the occasion. The graduates were felicitated by Prof. Debabrata Das, Director, IIIT-Bangalore.

#### October 11

#### **Photography Workshop**

The students had an interesting session on photography by our Alumnus, Mr. Bhargav Sridhar,



M.Tech 2017 batch Gold Medalist. He was a part of the Chhayachitra, IIIT-B's photography club right from its inception. He familiarized the participants with the technical aspects of professional photography and provided detailed explanation on hardware and lenses used in various DSLRs and also stressed on the importance of the intricate details such as usage of gears, value of lighting and background choice. He also highlighted on the importance of understanding the customer/client needs.

## October 22-24 Diwali Celebrations





The three-day Diwali programs were organized by Square One and SAC with help of student volunteers. Food Committee and Sports Committee also volunteered and supported to make the event a grand success. The festive feel was enhanced with the ethnic wear and the campus atmosphere looked colourful and vibrant with the students attiring with traditional ethnic dresses.

Square One had organized an open mic and dance night in which everyone enthusiastically participated and let loose their vocal cords and dance moves. The pièce de résistance was the performance from the music and dance club, captivating the audience and firing up everyone's enthusiasm to participate. Yummy food, decor and bursting of crackers complemented the Diwali mood.

# October 28 Volunteering Event



As part of celebrating the 'Month of Giving' during October, employees from our partner organization Microsoft India celebrated 'Volunteering Day' at Vision Empower (VE). The volunteering event was conducted at IIIT-Bangalore with 12 Microsoft volunteers interacting with the children from Karnataka Welfare Association for the Blind (KWAB), a special school VE works with. Through the tactile diagrams and Computational Thinking games, the volunteers and students exchanged much knowledge and smiles.

### November 11 IIIT-B Silver Jubilee Lecture Series



IIIT-Bangalore organized Silver Jubilee Lecture Series on November 11. Three distinguished speakers from academia and industry were invited to give lectures as part of the Silver Jubilee lecture series. Prof. Daniel Gatica Perez from EPFL, Lausanne, Switzerland spoke about "Focus on People: Five Questions from Human-Centered Computing", emphasizing on interdisciplinary research. Prof. Morency from Carnegie Mellon University described his take on "What is Multimodality" and its applications in Conversational AI. Raj Tumuluri, CEO of Openstream. The event saw enthusiastic participation from the faculty, students, and staff.

#### October 31

SPIC MACAY's Pravaaham – Indian classical music and dance at IIIT-Bangalore

After two years of hiatus owing to the pandemic, SPIC MACAY IIIT-Bangalore chapter held a series of 4 programmes on October 31. Pravaaham – a copious flow of Indian classical music and dance, was held in a newly built state-of-the-art auditorium at the campus. Doordarshan A-grade artist, Dr. Manju



Elangbam and his troupe performed 'Radha and Krishna' ballet. Padma Bhushan awardee, Sangita Kalanidhi Vidushi Sudha Raghunathan performed a Carnatic vocal for an hour and a half. Vidushi Lalgudi Vijayalakshmi and Vidwan Lalgudi GJR Krishnan's violins in Carnatic style, and a flawless Hindustani Flute performance by Pandit Ronu Majumdar left the audience awestruck. All-together, the renditions and performances took the audience to a much more spiritual level than the mundane concerts.

## December 15 Workshop on Sustainability



The K-Tech CoE on Machine Intelligence and Robotics (MINRO) with its partner Greendzine Technologies organized a workshop on sustainability. The workshop had sessions on behavioral aspects of building sustainable products, services, design thinking for sustainability, leveraging AI-ML technologies through case studies and success stories by practitioners.

## December 22 Christmas Celebrations at IIIT-B



IIIT-Bangalore ushered in Christmas on December 22 with a lot of fun and frolic. To keep up the spirit of Christmas, students, faculty and staff members were given a dress code to wear (red and white generally considered Christmas colours). Celebrations began with the students decorating the Christmas tree beautifully with different ornaments, tinsel, snow and twinkling lights and hung up balloons. The celebrations wouldn't be complete without Santa Claus, students were further thrilled when Ms. Saroja, the housekeeping staff dressed as Santa Claus arrived at the celebrating spot and distributed chocolates.

Everyone welcomed Santa Claus with melodious carols. Fun-filled games and delicious snacks like plum cake, pav bhaji and goli bajji also added colors to the celebrations, and the atmosphere was upbeat with joy and happiness.

#### January 5

# Dr. Kiran Seth Visited IIIT-Bangalore enroute His Trip on Bicycle



Dr. Kiran Seth, 73-year-old Founder of SPIC MACAY, Padma Shri awardee and former Professor Emeritus IIT Delhi, on a new mission of cycling from Kashmir to Kanyakumari, visited IIIT-Bangalore enroute his trip. Dr. Kiran was here at the campus to spread the message that cycling is good for health and promote Mahatma Gandhi's vision of simple living and high thinking. While addressing the students in the auditorium, he urged them to enroll as volunteers of SPIC MACAY (Society for the Promotion of Indian Classical Music and Culture Amongst Youth), which he founded 45 years ago. SPIC MACAY is a nationwide, non-political, people's movement to create awareness and inspire students to take an active interest in Indian heritage. Volunteers of SPIC MACAY organise over 5000+ programmes every year in 800 towns in India and abroad.

## January 11 Pitch Deck Competition



A pitch-deck Competition was organized at IIIT-Bangalore on January 11 for identifying suitable startups to be supported with TIDE 2.0 Grants from MeitY. The competition was publicized through IIIT-B's social media sites. Online Applications were called for through the IC portal. A total of 155 applications were received from aspirants, out of which 37 startups were shortlisted for participation in the Pitchdeck Competition. Out of the shortlisted startups, 22 competitors participated in the competition and presented their pitches to the jury. The jury carried out a thorough analysis and declared that 10 participants would be eligible for receiving the TIDE 2.0 Funding support. Out of these 10 startups, 5 are for EiR scheme and the other 5 are for Startup Grant. Out of the 6 IIIT-B students participated in the event, the following 4 students got selected for the funding. Mr Mayank Arora, Ms Asmita Zjigyasu, Mr Siva Jagadesh and Mr Rohit.

The jury was comprised of Dr. Lakshmi Jagannathan,

CEO, DERBI Foundation, Mr. Navratan Kataria, Director-Innovation & Entrepreneurship, K-Tech CoE for IoT & AI, Mr. Anjan Kumar, CEO, GreenDzyne, Gautham Sivaramakrishnan, Director- Operations, Headstart, and CTO, Blume Ventures.

#### January 18

Special Samvaad by Hackathon Winners



Samvaad team, under the guidance of Prof. Sujit Kumar Chakrabarti, organized talks by some of the students who had participated and won in popular hackathons.

The talks were based on latest advancements in technologies and trends such as AR/VR, AI etc. These talks gave a comprehensive idea about the entire process of hackathons that provided guidance and inspiration for aspiring participants.

The following four teams of hackathon winners shared the nitty-gritty of the process and talked about the 'hacks' for winning hackathons.

From the BigTechProject 2022:

Team 1: Agrim Jain and Akshat Garg and Team 2: Pranav Vajreshwari and Shivankar Pilligundla From ETH India 2022:

Team 3: Divyam Agrawal, Gagan Agarwal and G Sri Harsha and Team 4: Vignesh Bondugula, Muppuri Siva Jagadesh, Vijay Jaisankar, Dakannagari Dhamodhar Reddy and Venkat Suprabath Bitra.

# January 25 IIIT-B Launched ACM SIGCHI Student Chapter



At IIIT-Bangalore, a group of students under the guidance of Prof Preeti Mudliar started an Association of Computing Machinery (ACM) Special Interest Group for Computer-Human Interaction (SIGCHI). The IIIT-B ACM SIGCHI aims to engage students in thinking about technology design beyond interfaces and cosmetic software developments and includes human experiences and aspirations as well.

The event was attended by faculty, staff and students of IIIT-B. The launch event also comprised an insightful panel discussion by an eminent design team from Samsung R&D Institute, Bangalore comprising, Mr. Amit Chowdhury, Head of Design, Mr. Satish Patil, General Manager, Wearable IoT UX and Mr. Biju Neyyan, General Manager, Voice UX and was moderated by Prof. Preeti Mudliar.

#### January 26

# IIIT-B Awarded Best Performing Employees







Heartiest Congratulations to them for being Commended on Republic Day 2023 for Dedication / Achieving extraordinary outcomes



On January 26 during the 74<sup>th</sup> Republic Day celebrations, IIIT-Bangalore awarded certificates to six employees from the administration, finance,

academics and security for maintaining excellence in the discharge of their duties and that includes Mr. Jagadish Panduranga Patil, Chief Administration Officer, Mr. S Piramanayagam, Chief Finance Officer, Cdr J Venkada Prasad (Retd), Operations Officer (R&D), Ms. Nirmala B, Officer Academics (IT), Ms. G Pushpa, Senior Accountant and Mr. Mani Ram, Security Officer. Our Director, Prof. Debabrata Das, who was the Chief Guest of the Republic Day celebrations presented the certificates to all the awardees.

#### February 4-5

## IIIT-Bangalore co-hosts 30-hour POLICE HACKATHON



IIIT-B co-hosted a 30-hour POLICE HACKATHON with the Karnataka State Police Department on Feb 4<sup>th</sup> and 5<sup>th</sup> at the institute campus. The 2- day long hackathon saw 150+ participants, with some outstation participants as well. Participants comprised students, start-ups, corporate employees, concerned civic-tech enthusiasts. The hackathon started on 4<sup>th</sup> Feb morning with an inaugural function and got over by the 5<sup>th</sup> Feb evening by 5pm with a prize distribution ceremony. The hackathon, which was organised in hybrid mode by the Karnataka State Police aimed at fixing issues like crowd-sourcing of records, missing person identification and fraud app detection using technologies like Data Science, AI and Machine Intelligence.

# February 10-12 Infin8 2023



Infin8 2023 was IIIT-Bangalore's most extravagant cultural fest of the year. It was three days of fun and competitions with the sole goal of providing entertainment to all. The event was split into intracollege events on Day 1 and inter-college events on Day 2 & Day 3.



The students had emphatic display of competitive spirits and ravenous crowds at the food stall. The day's competitions started off with an art competition 'brush up'. Everyone had the opportunity to pick up a canvas and put their thoughts and imagination into colors. Following it up was Sargam, where the participants displayed their eloquent ability to sing melodious tunes. Once the singing ceased, the dancing began with Nritta allowing the dance floor to ignite with passion. Finally, the last competition was Ramp It Up, giving everyone an opportunity to have a fashion pageant.

#### February 24-25

IIIT-B Mphasis RISE 2023 Highlighted the Best in Research and Innovation



Research, Innovation, Society, and Entrepreneurship (RISE), the flagship research-based outreach event successfully concluded its seventh edition on February 25. The two-day event, which was hosted by the institute, was dedicated to showcasing the evolution of research and innovation in the institution. The event was conducted by the Mphasis Cognitive Computing CoE, supported by the F1 Foundation, the CSR arm of Mphasis.

This year's RISE was special as it promised to provide visitors with a bird's eye view of the latest research and innovation at IIIT-Bangalore. IIIT-B-Mphasis RISE 2023 featured an Open House on February 25, which included a keynote from Dr. Subrata Rakshit, Director of the Centre for Artificial Intelligence and Robotics (CAIR), followed by four panel discussions.

#### March 17-18

# IIIT-Bangalore held Web Science for Development (WS4D 2023)



IIIT-Bangalore hosted Web Science for Development (WS4D 2023) workshop which saw professionals from various domains, attending and addressing different thematic concerns pertaining to the use of web and mobile technologies in developmental efforts. The aim of the workshop was to foster a community of practitioners, researchers, entrepreneurs, students, and policy makers to jointly address socially relevant opportunities and challenges from the web and mobile technologies. The theme of this year's WS4D workshop was sustainable development and digital capabilities.

# March 21 **'MOSIP Country Conversations' at IIIT-Bangalore**



Around 60 delegates from 12 countries, development partners, advisors, World Bank, Government of India departments and stakeholders participated in a twoday's workshop called MOSIP Country Conversations 2023 at International Institute of Information Technology Bangalore (IIIT-B) recently.

Modular Open Source Identity Platform (MOSIP) is a digital identity open source platform developed at IIIT-B and rolled out in 5 countries as National Digital Identity and 7 more countries are using it as pilot for roll out. The workshop was inaugurated by Mr. Kris Gopalakrishnan, Chairman IIIT-Bangalore Governing Body and Axilor Ventures, Prof. Debabrata Das, Director IIIT-B and Prof. S Rajagopalan, President of MOSIP project. This was the first in person workshop post COVID, aimed to provide support to the MOSIPadopting countries.

#### March 21

IIIT-B hosted Government-to-Person payment systems (G2P) connect workshop



IIIT-B held the Government-to-Person Connect Workshop, a two-day in-person workshop for global representatives interested in the implementation of digital payment systems (G2P). The workshop was attended by 120 participants from 25 countries.

The workshop was intended for governments to share learnings, and discuss the opportunities and challenges in building and expanding G2P payment programmes. The agenda featured group discussions by key leaders involved with digital public infrastructure. The workshop focused on the need for digital public infrastructure (DPI) in G2P processes. The event encouraged participation from the audience, and facilitated discussions on the current state and future plans for G2P DPI in all the attending countries.

#### March 8

# Happy Healthy Hour as a part of International Women's Day



At IIIT-Bangalore, women folk including faculty, staff, students and housekeeping came together to celebrate being women. All dressed in various shades of purple, rejoiced the moments by participating in fun games and other recreational activities including screening of short movies. It was a moment to rejoice to be loved and admired. Also included in the celebrations was the addition of Happy Healthy Hour.

#### March 24

#### **One Minute Meditation Technique**



A session on 'just-a- minute' meditation technique was conducted by Mr. Divyesh Bhandary for students,

faculty and staff members. He explained participants how meditation for just a minute can help us to restore our innate creative capacity, cope during stressful times, regain a deep state of inner peace, renew our perspectives, enhance inner stability and tap into an unlimited power flow and nurture feelings of security and safety.

## March 25 CITAPP Reunion 2023



CITAPP Reunion-Reliving the past, reimagining the future was an ode to CITAPP's students, researchers (past and present) and faculty who have contributed to the journey of CITAPP for a decade now. Those in attendance reflected on their time here and discussed possibilities for new pathways in the future.

## March 27 Wikipedia Edit-a-thon by Lean In Club



In observance of Women's Day, the Lean-In Club along with the support of Prof. Janaki Srinivasan, Prof. Meenakshi D'Souza and Prof. Bidisha Choudhuri conducted an 'Edit-a-thon' event on March 27. An edit-a-thon is an event where-in some editors of online communities such as Wikipedia, edit and improve a specific topic or type of content. The aim of this edita-thon was to edit or create pages on 'Indian Women' on Wikipedia. Wikipedia is a very visible site, but there is an obvious gender gap on its pages. This was an attempt to reduce that gap. About 15 people including students and faculty came in to contribute to update the pages on various Indian Women. Some found images and some even started writing a Wikipedia page on those women of whom there was no mention on Wikipedia.

# March 29 Psychological First Aid Session



A workshop was conducted to equip participants on how to identify, approach, understand, and administer to others who may need emotional support while practicing self-care. The workshop oriented the participants on common psychological concerns and equipped them with the necessary skills in handling psychological problems at the primary level such as empathy, active listening, looking for the right cues, referring to a professional when needed and much more. The workshop was conducted by Ms. Blenita and Mr. Puneet Manuja, Co-Founder & COO, YourDost.

# April 1 **'Miles for Meals', 10k Marathon**



IIIT-Bangalore organized a 10 km long Marathon which commenced at 6 am in IIIT-B Campus, Electronic City in collaboration with CGI and ELCIA.

Hundreds of enthusiastic participants vied with each other to participate in the marathon. Priyanka C bagged the first prize of INR 15000 in the Women's category with Rashi CM standing a second with INR 10000 and Chandra Shekhar Pathak bagged the first prize in the Men's Category with Nithin Kumar M standing second.

The marathon named 'Miles for Meals' was a campaign to collect funds for mid-day meals for the needy school students studying in Government Schools in and around Electronic City. The participation in the Marathon supported around 5500 needy school students. It was a fun-filled day of fitness, communitybelonging, and fundraising.

## April 1 Sangam, Alumni Day



Sangam, the Alumni Day of IIIT-Bangalore, was an eagerly anticipated and awaited event organized annually by the Institute Alumni Committee and Student Council. The day-long events and celebration offered a plethora of exciting activities planned exclusively for the alumni.

Sangam featured stunning performances by the music (Symphony), dance (Impulse) and theatre clubs (Parvaaz), captivating the alumni. Notably, alumni and their family members also participated in the event. Sapan Varma's rib-tickling stand-up comedy program kept the audience in stitches. The festivities began with networking, followed by performances, and culminated in a delicious dinner. The evening was a wonderful mix of fun and nostalgia, where alumni reconnected with their batch mates and professors. The student committee and council worked diligently to ensure the event's success.

April 15-16 IIIT-B Hosted Electhon'23



The Election Commission of India (ECI) in its determination to use the young minds to tackle electoral challenges faced by our country and decided to host Electhon'23 at IIIT-Bangalore. A 30-hour offline hackathon on April 15 & 16 designed to reinforce the electoral future was the first-of-its-kind hackathon organized by ECI in association with Chief Electoral Office, Karnataka, IIIT-Bangalore and IISc to address critical issues in the electoral process.

About 40 teams across India were shortlisted for a 30-hour offline hackathon at IIIT-B. The participants worked tirelessly overnight to develop creative and innovative solutions to challenges faced in the electoral process. Leveraging the technology, the teams worked on their ideas, creating pitch decks, receiving the live feedback from industry experts and demonstrating the functionality of their solutions.



#### April 19

#### Inauguration of AutoGrow Laboratory



AutoGrow Laboratory was inaugurated on April 19, by Prof. Debabrata Das, Director, IIIT-B in the presence of Dr. Ramesh Kestur, the project's Principal Investigator (PI), IIIT-B, Dr. Aswath C.R, Principal Scientist, IIHR, Prof. Chandrashekar Ramanathan, Dean (Academics), Prof. Srinath Srinivasa, Dean (R&D) and Prof. Jyotsna Bapat, Dean (Faculty) of IIIT-B.

IIIT-Bangalore partnered with the Indian Institute of Horticultural Research (IIHR) to create an IoT-based Data Sensing System for AutoGrow, an Autonomous Green House System for Precision Agriculture. This project was set up to create a fully automated and self-regulating farming system.

## April 22 Staff Day out to Area 83



On a sunny saturday morning (April 22), a staff day out was planned to Area 83 on the outskirts of Bangalore, where employees and their family members could engage and enjoy themselves in non-work-related activities and socialize with one another, it was an opportunity to unwind and have fun.

#### April 25

# Farewell to Prof. Zar Zar Linn, Myanmar Institute of Information Technology



Dr. Zar Zar Linn, faculty from MIIT was in IIIT-Bangalore for six months from November 2022 through an ISRF fellowship. In collaboration with the research scholars at WSL, Dr. Linn explored the design of conversational Al agents to extend them for the use with the Myanma languages. On April 25, IIIT-Bangalore bid a farewell to Dr. Linn and wished her success in future endeavors.

## May 6 Faculty Day out at Area 83



IIIT-Bangalore's faculty members, accompanied by their families, went on an exhilarating day of exploration and excitement, unearthing their inner adventurers and immersing themselves in the joy of discovering new elements of fun at Area 83, a resort in the outskirts of Bangalore.

#### May 12

Micro Workshop on 'Enhancing Security, Efficiency & Performance in B5G Networks'



IIIT-Bangalore, TSDSI and DoT jointly organised a hybrid Micro Workshop on 'Enhancing Security, Efficiency & Performance in B5G Networks'. The workshop introduced the audience to some of the state-of-the-art challenges and how to address them for designing beyond 5G wireless systems.

#### May 19

# Workshop on 'Various Aspects of Quantum Computing'



IIIT-B COMET Foundation organized a workshop on 'Various Aspects of Quantum Computing' at IIIT-B. Several topics including 'cold atom quantum technologies', 'hybrid quantum machine learning methods-use cases', 'non-linear oscillators & adiabatic quantum computation' and 'connectivity in large computing networks' were covered in the workshop.

# June 5 IIIT-Bangalore Celebrated World Environment Day



IIIT-Bangalore celebrated World Environment Day on June 5, demonstrating the institute's unwavering commitment to environmental sustainability. The primary objective of the event was to raise awareness about the vital significance of environmental protection and the implementation of efficient waste management practices. Engaging in a range of activities, the Director, Prof. Debabrata Das, staff members, and graduating students actively participated in discussions and initiatives throughout the day. The focus of the drive was to plant indigenous fruit-bearing trees, fostering biodiversity and contributing to a greener environment. A total of five tree saplings were meticulously planted during the event, with each sapling receiving special attention:

- Butter fruit and Java plum by Graduating Students-2023
- Star fruit by the female staff of IIIT-B
- Java plum by our Director, Prof. Debabrata Das, Registrar, Commodore, SR Sridhar (Retd) and CAO, Mr. Jagadish P Patil.
- Water Apple by out Director, Prof. Debabrata Das

#### June 12-14

# IIIT-Bangalore Empowered Power Grid Corporation Professionals



IIIT-Bangalore organized sessions exclusively for professionals from Power Grid Corporation of India Limited who had registered for the Post Graduate Diploma in Data Science/Machine Learning/Artificial Intelligence. It was the 2<sup>nd</sup> Cohort that benefited from the guidance of IIIT-Bangalore's esteemed faculty members. The learners had the opportunity to engage in direct, face-to-face interactions with the faculty members, enabling them to strategize their career development and project work effectively.

# June 21 IIIT-Bangalore Celebrated 'Yoga for Vasudhaiva Kutumbakam'



On the June 21, IIIT-Bangalore joyously celebrated the 9<sup>th</sup> International Day of Yoga, like every year. The campus Sports Arena, specifically the Badminton Hall served as the venue for the yoga session. The event welcomed the participation of students, faculty and staff members. Mr. Kaushik S.V., Head of the Institutional Programme at the Art of Living Foundation graced the occasion as an esteemed guest and also conducted a yoga session.

#### **Farewell Function**



Prof. GN Srinivasa Prasanna and Prof. Subajit Sen bid farewell amidst a heartwarming ceremony as they gracefully retired on June 30, 2023. The occasion was also marked by a farewell event dedicated to Prof. Neelam Sinha, who embarked on a new chapter of her career at a different organization.

# July 5-6 IIIT-B Hosted Frontiers' Symposium



The Frontiers Symposium brought together global experts to explore the transformative potential of Digital Public Infrastructure (DPI) in promoting social equity, economic growth, and sustainability, while ensuring accessibility and inclusivity for all citizens.

The workshop served as a crucial platform for participants to engage in insightful discussions, exchange ideas, and collaborate on cross-cutting issues within the three key themes: i. Designing DPI for Sustainability, ii. Social Impacts of DPI and iii. Security, Privacy, and Availability of DPI. July 7 IIIT-B invited Prof. Catherine Holloway, Academic Director of Global Disability Innovation Hub (GDI Hub) & Professor of Interaction Design & Innovation at UCL. She spoke on 'Global Disability Innovation -Lessons Learnt on Inclusive Innovation.' In her talk, Prof Cathy Holloway explored the foundations for GDI Hub and the lessons learnt since GDI Hub was founded. She highlighted the journey of developing and delivering AT2030, a flagship programme from UK aid to understand what works in getting assistive technology to people globally.

#### July 12

## 'Meet & Greet' for Turing Laureate, Prof. Jeffrey Ullman



On July 12, Prof. Jeffrey Ullman, a Turing Laureate and the Stanford W. Ascherman Professor of Computer Science (Emeritus) at Stanford University was warmly welcomed by IIIT-Bangalore and ACM India Bangalore Professional Chapter. "Meet and Greet" an interactive session was organized jointly by IIIT-Bangalore and ACM India Bangalore Professional Chapter as part of the Days'event.

#### **Kargil Vijay Diwas**



IIIT-Bangalore observed Kargil Vijay Diwas by paying tribute to the courage and bravery demonstrated by the Indian soldiers who selflessly laid down their lives for the nation during the Kargil War in 1999. This occasion carries a distinct importance as it commemorates the success of Operation Vijay, a pivotal military achievement that secured victory over Pakistan in the Kargil War.

#### July 31

#### Farewell to Mr. Ramesh Sundararaman



IIIT-Bangalore bid adieu to Mr. Ramesh Sundararaman, who was part of the Office of Research-Engagement & Outreach (OREO). He devoted a significant span of nine years his stay at IIIT-B by initially enriching the teaching realm and later playing a pivotal role in vital outreach endeavors.

July 26

# SAMVAAD WEEKLY TALK SERIES

August 1: "Self-learning robots displaying humanmotor-control-like learning features" by Prof. Harish P.M, IIT Gandhinagar.

August 8: "Navigation and Tracking in Space" by Prof. Sanat K Biswas, IIIT Delhi.

August 22: "Computational Transcendence: Responsible Agency" by Prof. Srinath Srinivasa and Jayati Deshmukh, IIIT-Bangalore.

August 29: "Testing and verification of programs manipulating industrial robots" by Prof. Meenakshi D'Souza, IIIT-Bangalore.

September 5: "Innovations in Academics" by Prof. U. B. Desai, IIT Hyderabad.

**October 10:** "Automotives – an Emerging Platform for CS/IT Innovations" by Prof. Roland Haas, Prof. Srinivas Vivek and Prof. Sujit Kumar Chakrabarti, IIIT-Bangalore.

**October 17:** "Software Defined Vehicles: Safety and Verification Challenges and Solutions" by Dr. Ramesh S, General Motors.

**October 31:** "3GPP network-based positioning: past, present and immediate future" by Dr. Satyam Dwivedi, Ericcson R&D.

**November 7:** "Digital Twin for Engineering -Challenges and Opportunities" by Prof. Suresh Nagesh, PESIT.

**November 14:** "Extracting geometry to understand the data from automotive-environment-sensing" by Prof. Jaya Sreevalsan Nair, IIIT-Bangalore. January 16: "ETHIndia2022 Livepeer Winner – Lenstok" by Divyam Agrawal, Gagan Agarwal and G Sri Harsha and Vijay Jaisankar, IIIT-B Students.

**January 23:** Talk 1 "Walf of Life - a student Metaverse" by Akshat Garg and Agrim Jain.

Talk 2: "DragonVerse - Ecommerce of the future" Shivankar Pilligundla and Pranav Vajreshwari IIIT-B Students.

March 6: "Geospatial Technologies for Urban Studies" by Rahisha T. PhD Scholar, IIIT-B.

March 13: "Performance Evaluation of Virtual Network Service Function Deployment in Docker Containers" by Nithya Ganeshan, PhD Scholar, IIIT-B.

March 20: "Research to Entrepreneurship - Solving Interesting Problems in Railway Domain" by Dr. Manish Kumar, Mathologic.

March 27: "A Case for Correctly Rounded Math Libraries" by Prof. Santosh Nagarkatte, Rutgers University.

**April 10:** "Proof-oriented programming for highassurance systems" by Dr. Aseem Rastogi, Microsoft Research India.

**April 17:** "Formal Verification of an Indigenous Realtime Operating System" by Prof. Meenakshi D'Souza, IIIT-Bangalore.

April 24: "Automated Black-box API Testing" by Dr. Dipti Kalyan Saha, IBM Research Lab, India.

**May 8:** "Abstractions for Network Control Plane Verification" by Prof. Aarti Gupta, Professor Dept. of Computer Science, Princeton University.

June 26: "Being an Inventive Student - with a missionary DNA" by Mr. Peter Chacko, Founding Technologist & General Leader, Neridio Systems Pvt. Ltd.

# **IIIT-B'S ACHIEVEMENTS**



#### First Phase of Tele MANAS was Launched



In the first phase of Tele MANAS, telephone-based counselling is provided through the State Tele MANAS cells, which are staffed by trained counsellors and mental health specialists. This unique service was launched on 10 Oct 2022 on the occasion of World Mental Health Day. A simple-to-use IVR-based system enables access to these services from anywhere in the country using the toll-free national helpline numbers 14416 or 1-800-891-4416. In subsequent phases, video-based and in-person consultations with psychiatrists will be integrated into the programme. The Tele MANAS platform will be integrated with the Ayushman Bharat Digital Mission framework and thus with the overall digital healthcare ecosystem of the country.



#### **IIIT-B Bestowed Silver Jubilee Icon Award**



In November, 2022, IIIT-Bangalore received the Silver Jubilee Icon Award at the Bengaluru Tech Summit, 2022. The award recognized IIIT-Bangalore for its contribution to the journey of Karnataka State and for playing a crucial role in the development of technology, research, policy and technical committees in making Bengaluru City the most sought-after destination in India. IIITBangalore was also recognized for being one of Karnataka's major contributors to the state economy, by helping generate significant employment and positioning Karnataka as a global hub.

Prof. Debabrata Das, Director, IIIT-Bangalore and Prof. Chandrashekar Ramanathan, Dean (Academics), IIIT-Bangalore received the award from Karnataka Chief Minister, Basavaraj Bommai. In March 2023, our Chairman, Mr. Kris Gopalakrishnan, inaugurated the Centre for Digital Public Infrastructure (CDPI) with a global mission to facilitate the expansion of Digital Public Pnfrastructure. Presently, the CDPI is actively collaborating with numerous countries to achieve its objectives.

#### Mr. Bill Gates Visited MOSIP in Bangalore



Mr. Bill Gates, Co Founder of Microsoft and Gates Foundation visited Modular Open Source Identity Platform (MOSIP) on March 4, 2023 in Bangalore. He appreciated IIIT-Bangalore's contributions to the Digital Identity platform initiatives to the world. In the past one year, an additional five countries have entered into Memorandum of Understanding (MoUs) with IIIT-Bangalore, bringing the total to 11 countries. These partnerships are aimed at utilizing the MOSIP ID platform for the implementation of the respective National Identity programs.

**IIIT-B's Innovation Centre Received Funds** 



The Innovation Center at IIIT-Bangalore secured funding from various sources including TIDE, Gol, the Start-up India seed fund and the Samsung CSR fund to support its incubation efforts. A total of 96 start-ups have been nurtured within the IIIT-B campus, with 18 of them currently active on-site. Over the past year, our start-ups have earned recognition, claiming 1 international award and 2 national awards. In 2023, four students from our institution, Mayank, Rohit, Siva, and Asmita – emerged as winners in a start-up competition hosted by the Ministry of Electronics and Information Technology (MeitY), Government of India, securing funding for their groundbreaking ideas and innovations.





# FACULTY & STAFF ACHIEVEMENTS

Prof. Debabrata Das, Director, IIIT-Bangalore was awarded the prestigious IETE-SVC Aiya Award 2022.



Prof. Debabrata Das was conferred the IETE-Prof SVC Aiya Memorial Award 2022 for his research guidance and momentous contributions in the area of Telecommunications at recently held 65<sup>th</sup> Annual General Body function of the Institute of Electronics and Telecommunication Engineers (IETE) in Hyderabad.

The Prof. SVC Aiya Memorial Award 2022 is in recognition of Prof Das's groundbreaking research in the field of Medium Access Control (MAC) protocols of broadband wireless networks to boost performance and usher in green communication. The award also recognizes Prof. Das's enormous work and steadfast dedication in spreading knowledge in the field of telecommunications by inspiring students and research faculty to work on innovative ideas that would culminate in landmark breakthroughs.

Prof. TK Srikanth, the PI for IIIT-B's EHRC project Tele-MANAS, has achieved another accolade. The project has reached a significant milestone nationwide by handling 1 lakh and 60000 thousand calls in 8 months through the National Tele-MANAS platform since its launch in October 2022. Prof. Srikanth and his team have played a pivotal role in shaping the program's technical architecture and overseeing technology activities in collaboration with the Ministry of Health, Gol and NIMHANS.

Prof. Srinath received two projects: Indian Data Exchange, from National Security Council, Gol, and other project CADS-CODR (Data Lake Project) from planning department of Government of Karnataka.

Prof. Amit Prakash, received a research project for Creating a Computational Curriculum for Visually Impaired (VI) students is SEEDS which means Scalable Early Education and Digital Scaffolding. IIIT-B COMET Foundation, Prof. Jyotsna and Dr. Milind Gandhe project on Advanced Communication Systems, from NM-ICPS, DST, Gol, have been developing 5G-Advance ORAN base-station and RIS. The collaborators of this project recently pushed Indian agenda of 6G in ITU.

Prof. Nanditha Rao, received a research project, "Vector Processor Design", SERB, International Institute of Information Technology Bangalore.

Prof. Priyanka Das, received a research project, "Intelligent reflecting surface for wireless communication" SERB, International Institute of Information Technology Bangalore.

Dr Prem Singh, received a research project, Integrated Circuit for ultra-low power wireless IoT Devices, MeitY, International Institute of Information Technology Bangalore. Prof. Meenakshi D'Souza's expertise and dedication were recognized Secretary cum Treasurer of the ACM India Council for the past four years. Prof. Meenakshi D'Souza along with Prof. Jaya Sreevalsan Nair have also been selected for grade elevation to ACM Senior Members 2022.

Prof. Ashish Choudhury (IIIT-B) along with Prof. Arpita Patra from IISc authored a book titled 'Secure Multi-Party Computation Against Passive Adversaries' published by Springer.

Prof. Debabrata Das, Director, IIIT-B took charge as Chairman of IEEE India Council in January 2023.



Prof. Meenakshi D'Souza's expertise and dedication as a Secretary cum Treasurer of the ACM India Council for the past four years were recognised. Prof. Meenakshi D'Souza along with Prof. Jaya Sreevalsan Nair were selected for grade elevation to ACM Senior Members 2022.

Prof Janaki Srinivasan, Prof V Sridhar & Prof TK Srikanth received a Project Grant from UC Berkeley.

The project titled ""My data or yours?" Unraveling multi party privacy among consumers of digital credit in India", with Prof Janaki Srinivasn as PI, and Profs V Sridhar and TK Srikanth as Co-PIs has been selected for a 2-year research funding by the Center for Effective Global Action's Digital Credit Observatory (DCO), University of California Berkeley, USA. This mixed methods study will be conducted by researchers at The International Institute of Information Technology, Bangalore (IIIT-B) with support from partners at Consumer Unity & Trust Society (CUTS). The grant is part of the research funding initiative of the Bill & Melinda Gates Foundation.



For the paper titled 'Multi-User Service Throughout Estimation for Adaptive Resource Management in 5G-Advanced Sliced Networks' by Sharvari Ravindran (Ph.D student), Yogita Pimpalkar (MS by Research student), Prof. Jyotsna Bapat and Prof. Debabrata Das received IEEE CONNECT 2023 Best Paper Award (academia) in the 9<sup>th</sup> International Conference on Electronics, Computing and Communication Technologies, IEEE CONNECT organized by IEEE Bangalore section at MSRIT, Bangalore.

Prof. G R Sinha was elevated as ACM Senior Member. This Grade recognizes those ACM members with at least 10 years of professional experience and at least 5 years of Professional Membership in the last 10 years, who have demonstrated performance through technical leadership, and technical or professional contributions.

# **GUEST VISITORS**



#### August 12



Shri Ashok Chandra Panda, Hon'ble Minister of Odisha In-charge of Empowerment of Persons with Disabilities, and Secretary, Shri Bhaskar Jyoti Sarma visited IIIT-Bangalore on 12<sup>th</sup> August. The team had detailed discussions with our Director and the VICT (Computational Thinking for Visually Impaired persons) project team. The meeting was aimed to introduce and implement VE interventions in the state of Odisha, as the state has decided to roll out the project in special schools run by the Government for visually impaired to make science, maths and computational thinking curriculum more accessible to its visually impaired children.

#### September 5

A delegation of Ugandan officials, led by His Excellency Permanent Secretary to the Ministry of Uganda, visited the campus. The delegation spent two days interacting with IIIT-B and MOSIP team and acquired insights and experience on establishing digital ID systems using MOSIP.

#### September 21

A French Delegation, including the India head of CNRS (France's Scientific Research Foundation) visited the campus to promote collaborations and academic exchanges with France. The delegation discussed with our faculty and students on research collaboration opportunities, such as student exchange programmes and study opportunities in France.

#### September 22

A delegation from Bill and Melinda Gates Foundation visited IIIT-Bangalore and had a discussion with the Director, Prof. Debabrata Das, President of MOSIP, Prof. S Rajagopalan and also had a walk around MOSIP Experience Centre.

#### September 30

A three-member team from the Department of Science and Technology (DST), Gol comprising Dr. JBV Reddy [Scientist F, DST], Dr. Anurag Mishra [Scientist C, DST], and Dr. Umesh Kumar (Deputy Secretary, Finance Division, DST) visited IIIT-B COMET Foundation on September 30, 2022. Prof. Debabrata Das Director, IIIT-Bangalore, and Chairman of IIIT-B COMET Foundation briefed about the progress.

#### **October 8**

Minister of Higher Education and Research of the



Government of Togo, Prof Majeste Wateba, visited IIIT-Bangalore for an interactive and awareness session about the University and its various projects. The Minister also visited MOSIP experience center and had an insight regarding the Togo and IIIT-B's collaboration on digital identification.

#### October 10



Mr. Satish Sivan, Joint Secretary, Ministry of External Affairs, Gol visited the IIIT-Bangalore campus and engaged in a wide ranging discussions on possible collaboration with MOSIP in capacity building of various countries.

#### **October 15**



A delegation led by Director General, Norwegian Agency for Development Cooperation (Norad) visited IIIT-Bangalore. They gathered information about the progress made by MOSIP and discussed on the future outlook of the project.

#### **October 18**



Dr. Bala Sridhar, Export Catalyst and NHS Account Specialist for Healthcare UK, Department of International Trade UK visited our campus to discuss avenues for collaboration in academics, research and student exchange programmes.

#### **November 17**



Ms. Anne-Marie Engtoft Larsen, Tech Ambassador, Ministry of Foreign Affairs, Denmark visited the IIIT- B campus.

#### **December 14**



A delegation from Toshiba visited IIIT-Bangalore to explore mutual collaborative research opportunities between IIIT-B and Toshiba.

#### December 19



Three officers from Software Development Institute (SDI) Bangalore of Indian Air Force visited IIIT-Bangalore on December 19, 2022. The officers met our Registrar, Commodore SR Sridhar, Dr. Milind Gandhe, CEO, IIIT-B COMET Foundation, Prof. Vinod V Reddy and Prof Prem Singh and deliberated on the possibilities of collaboration in addressing the challenges in designing hardware and waveform for communication in airborne applications.

#### February 9



Several senior managers from Marvell India visited IIIT-Bangalore on February 9 to interact with the VLSI faculty members, ECE students and the placement team. The focus of the meeting was to mutually share areas of expertise, explore possible ways to collaborate and interact with students.

#### February 15



A South Korean delegation led by the Mayor, Ms. Shin Gye-Yond and South Korean Embassy in India visited the campus to familiarize the research and innovation activities at IIIT-Bangalore.

#### March 7

Prof. Johanna Weaver, Director of the Australian National University Tech Policy Design Centre visited IIIT-Bangalore.

#### March 14

IIIT-Bangalore hosted Sony Sensing Solution University Program (SSUP) Team members Mitsuru Tanabe (Semiconductor Solutions, Japan), Hitomi Kamata (Semiconductor Solutions, Japan), Cheng Zhang (Semiconductor Solutions, Japan), and Anil Sasidharan India Software Center Pvt. Ltd.) on March 14. The Sony SSUP Team discussed various ongoing SSUP initiatives across the world and in India.

#### March 15



Delegation from Siemens Visited IIIT-Bangalore.

#### April 21



**Delegation from Siemens Visited IIIT-Bangalore** 

#### June 6



Dr R Balasubramaniam, Member, of the Human Resources department of the Capacity Building Commission under the Government of India, visited our campus to explore potential collaborations.

#### June 14



Kenya Delegation visited the IIIT-B campus

**July 6-28** 



IIIT-B conducted workshops for a group of Spanish students and faculty visiting from July 6-8. The sessions covered technology-driven topics such as 'Enhancing International Volunteer Marketing through Technology (with a focus on Social Media)' and 'Transforming International Volunteer Experience with Technology.'

Our Dean (Academics), Prof. Chandrashekar Ramanathan, Prof. Amit Prakash, Prof. Venkatesh and Mr. Manoj H P conducted workshops for the students.

#### July 26



Visit of Learning and Development team, Continental Automotive







International Institute of Information Technology Bangalore

# IIIT-B MOUs





#### **October 18**

IIIT-B signed MoU with S-VYASA Bangalore



A Memorandum of Understanding (MoU) was signed between the International Institute of Information Technology Bangalore (IIIT-B) and Swami Vivekananda Yoga Anusandhana Samsthana (S-VYASA) Bangalore, with an aim of conducting impactful scientific research in the areas of Yoga and similar practices with the AI intervention for community wellbeing and healthcare.

#### **December 22**



An MoU was signed between the Karnataka Government and IIIT-B. The MoU was to oversee the design and implementation of the Karnataka Data Lake project.

#### April 18



Key officials from Ernst & Young (EY) visited the campus to sign an agreement with IIIT-B. As per the agreement, EY will be IIIT-B's technical implementation partner for the Tele Manas project in EHRC.

#### **November 30**

MoU Between IIIT-B COMET Foundation & IIIT-B Innovation Centre



IIIT-B COMET Foundation and IIIT-B Innovation Centre signed MoU on November 30 in the gracious presence of Prof. Debabrata Das, Director, IIIT-B to facilitate research and innovation, promote entrepreneurship, and the building of a vibrant start-up ecosystem in the technology area of Advanced Communication Systems.

#### **May 19**

#### MoU Signed between Novo Nordisk and IIIT-B



Novo Nordisk, a Global Business Services (NOVO NORDISK GBS) and IIIT-Bangalore inked a Memorandum of Understanding (MoU) to combine IIIT-B's technology and digital capabilities with Novo Nordisk's development and data science expertise to explore breakthrough innovations and efficiency gains to better serve the needs of patients. Under the terms of the MoU, IIIT-B and Novo Nordisk GBS will jointly engage in initiatives including research, innovation projects, hackathons, case competitions, guest lectures, education programs, internships, placements, employee development, branding and corporate social responsibility collaborations.

#### July 4

IIIT-B Signed MoU with Continental Automotive Components India and Continental Autonomous Mobility India



IIIT-B and Continental Automotive Components (India) Pvt Ltd entered into a Memorandum of Understanding (MoU) and a Non-Disclosure Agreement (NDA) to foster collaboration in the field of research and development. Additionally, IIIT-B and Continental Autonomous Mobility India Pvt Ltd have also signed an MoU and NDA to explore joint opportunities in autonomous mobility solutions.

#### July 21

MoU Signed between NRSC of ISRO and IIIT-Bangalore



A Memorandum of Understanding (MoU) was signed between IIIT-Bangalore and National Remote Sensing Centre (NRSC), Indian Space Research Organisation (ISRO), Department of Space, Government of India for a joint collaborative research on "Monitoring Growth and Yield of Tomato Crop using Multi-Source Data by Machine Learning Techniques" on 21 July, 2023 at RRSC South, NRSC, Bangalore. The MoU is about developing Deep Learning model for agriculture crop yield estimation. Commodore (Retd.) S R Sridhar, Registrar, IIIT-Bangalore and Dr. S. K. Srivastav, Chief General Manager, NRSC, ISRO, Dept. of Space, Govt. of India signed the MoU in the presence of Prof. Srinath Srinivasa, Dean (R&D), IIIT-B, Prof. Uttam Kumar, Dr. Ramachandra Hebbar, GM, RRSC South, NRSC, ISRO and Other Senior Scientists from NRSC, ISRO.

#### July 27

MoU Signed between IIIT-B and Universidad Nacional De Rafael



IIIT- Bangalore signed an MoU with Universidad Nacional De Rafaela to explore the adoption of MOSIP at the University. MOSIP will be used to test a University-wide ID system, which can be relied upon for day-to-day administration of the campus.

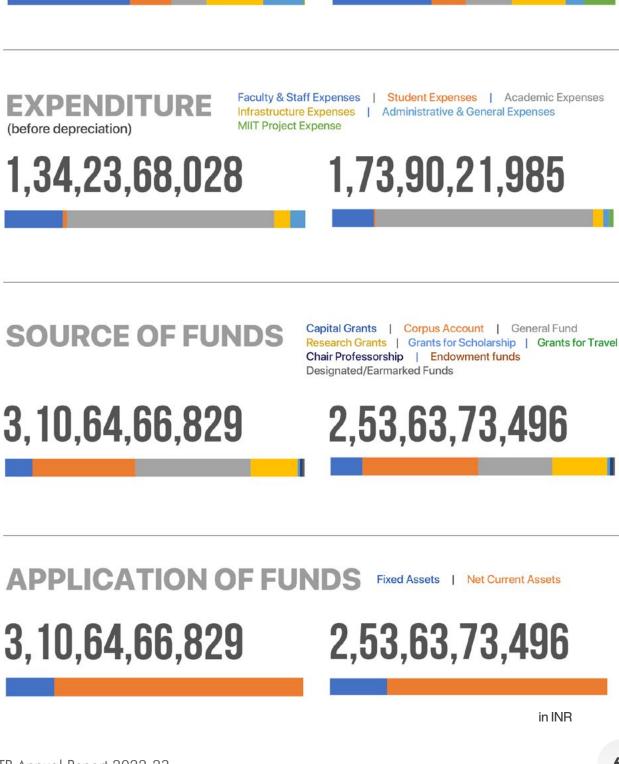


International Institute of Information Technology Bangalore

# FINANCIALS







Tuition Fees | Hostel and Facility Fees |

Other Receipts | MIIT Mentoring Income

31-March-2022

Academic Activities | Interest on Bank Deposits

2,25,87,32,602

31-March-2023

INCOME

1,94,46,61,576

in INR

International Institute of Information Technology - Bangalorc 26/C, Electronics City, Hosur Road, Bangalore - 560 100					
Balance Sheet as at 31st March 2023					
			( Rs		
SOURCE OF FUNDS	Sch.No.	31-Mar-23	31-Mar-22		
Unrestricted Funds:					
Capital Grants	A	28,37,00,000	28,37,00,00		
Corpus Account	B	1,06,71,68,412	1,03,18,56,84		
General Fund	c	1,19,72,10,177	66,12,12,95		
Restricted Funds:					
Research Grants	DA	48,73,88,716	49,18,09,47		
Grants for Scholarship	DB	2,56,34,751	2,57,45,30		
Grants for Training	DC	33,626	42,50		
Chair Professorship	EA	2,52,88,641	2,69,79,28		
Endowment funds	EB	37,89,440	27,95,35		
Designated/Earmarked Funds	EC	1,62,53,066	1,22,31,77		
Total		3,10,64,66,829	2,53,63,73,49		
APPLICATION OF FUNDS	Sch.no.	31-Mar-23	31-Mar-22		
Property, Plant and Equipment:					
Net Block	F	50,66,46,517	52,02,71,27		
Current Assets, Loans & Advances:					
Advances & Receivables	G	10,98,62,754	8,62,00,812		
Deposits	н	9,21,390	10,41,390		
Prepaid Expenses	I	79,74,729	75,74,844		
Cash & Bank Balances	J	2,68,62,37,402	2,08,16,66,17		
MIIT Project Current Assets	<b>W</b> 1	1,18,77,326	1,98,87,21		
		2,81,68,73,601	2,19,63,70,43		
Less : <u>Current Liabilities &amp; Provisions:</u>					
Current Liabilities	ĸ	14,70,46,691	10,11,56,474		
Provisions	L	7,00,06,598	7,05,04,014		
MIIT Project Current Liabilities	W2	-	86,07,72		
		21,70,53,289	18,02,68,213		
Net Current Assets		2,59,98,20,312	2,01,61,02,224		
Total		3,10,64,66,829	2,53,63,73,49		
Significant Accounting Policies & Notes			_,00,00,10,490		
forming part of Accounts	x				
		As per our report of even da	te		
For International Institute of Information		For Rao Associates			
Technology Bangalore		Chartered Accountants			
	/	Firm Reg. No. 0030805			
Debabrata Das STUTE OF INFORMA		(hunder)	SHAD * RAD REA		
		huat			
Prof. Debabrata Das	) /	Sandeep S Shekar	EL JE		
Director 😫 💶 🗛	<b>2</b>	Partner	Sum to		

Place: Bangalore Date: 06th September 2023

BANGALORE

Membership No. 232631

Income and Expenditure Account for the year ended 31st March 2023					
Income	Sch.No.	31-Mar-23	31-Mar-22		
Tuition Fees			_		
Hostel and Facility Fees	M	1,65,86,45,546	2,02,41,04,34		
Academic Activities	NO	6,82,14,949	4,35,66,58		
Interest on Bank Deposits	P	5,74,01,602	5,88,69,65		
Other Receipts		9,25,98,304	6,84,99,09		
MIIT Mentoring Income	Q	6,51,48,322	2,40,02,10		
TOTAL (a)	W3	26,52,853	3,96,90,82		
		1,94,46,61,576	2,25,87,32,60		
Expenditure	Sch.No.	31-Mar-23	31-Mar-22		
Faculty & Staff Expenses	R				
Student Expenses	S	25,98,85,002	25,74,18,90		
Academic Expenses	T	1,87,60,455	1,01,13,65		
Infrastructure Expenses	U U	92,54,33,582	1,34,39,31,38		
Administrative & General Expenses	v	7,17,19,283	6,36,65,48		
MIIT Project Expense	W4	6,63,06,983	3,54,99,32		
TOTAL (b)	W4	2,62,723	2,83,93,24		
Excess of Income before Interest, Depreciation and Appropriation (a-b)	-	1,34,23,68,028 60,22,93,548	<u>1,73,90,21,98</u> 51,97,10,61		
Depreciation on Assets	F	(6,05,94,114)	{3,91,44,11		
Excess of Income before Appropriation	<u> </u>	54,16,99,434	48,05,66,50		
Appropriation: Transferred to Corpus Fund		-	30,00,00,000		
Appropriation: Student Benevolent Fund		57,02,215			
Surplus/ (Deficit) for the year transferred to General					
Fund	<b>└────</b> ↓	53,59,97,219	18,05,66,503		
Significant Accounting Policies & Notes	·				
forming part of Accounts	X				

For International Institute of Information Technology Bangalore

NATION

BANGALORE

Debabarota Do

Prof. Debabrata Das Director

Place: Bangalore Date: 06th September 2023



For Rao Associates Chartered Accountants Firm Reg. No. 0030808



International Institute of Information Technology Bangalore

# INFRASTRUCTURE





# June 30 Inauguration of Bio Gas Plant



On June 30, IIIT-B commissioned a decentralized biogas plant with an impressive capacity of 100kg, which produces an approximate 10-11 cubic meters of methane gas on daily basis that fuels our campus kitchen which in turn saves 60 LPG cylinders per month. Mr. Gururaj Deshpande, Global Leader and India Leader - Client Technology at EY (GDS), ex-Infosys SVP, Edgeverve COO and Center Head, Bangalore was invited as a chief guest for the opening ceremony.

# December 9 500 KVA rooftop solar power system installed at IIIT-B



On December 9, institute installed a massive 500 KVA rooftop solar system that comprises 393 solar panels. It was inaugurated by our Chairman, Mr. S. Gopalakrishnan in the presence of our Director, Prof. Debabrata Das, Registrar, Commodore SR Sridhar, Dean (Academics), Prof. Chandrashekar Ramanathan, Dean (R&D), Prof. Srinath Srinivasa, Dean (Faculty), Prof. Jyotsna Bapat, Chief Administration Officer, Mr. Jagadish P Patil and Chief Financial Officer, Mr. S. Piramanayagam. Between 2017 and 2022, the power consumption of the institute had increased by 21.88 % (from 3,680 units to 4,711 units per day). Nearly 40% of the power requirement would be met with the installed solar power system that has 498.43 KWP capacity.



### January 9 Inauguration of Snacks Vending Machine



In order to give students a munching break, a snacks vending machine was installed near Bhaskara building. It was inaugurated by our Director, Prof. Debabrata Das. Our Registrar, Commodore, SR Sridhar and Chief Administration Officer, Mr. Jagadish Patil were also present at the event.

### June 27 A Separate Counseling Room was Inaugurated



By having a designated room for counseling, IIIT-Bangalore acknowledges the importance of mental health and recognizes the unique challenges faced by the students in their academic pursuits. Having a dedicated counselling facility, highlights the institutes' commitment in supporting the students emotional and psychological well-being as an integral part of their academic journey. Our Director, Prof. Debabrata Das inaugurated the facility in the presence of key officials including faculty members, students and the team from YourDost.



International Institute of Information Technology Bangalore

# PEOPLE





### **FACULTY MEMBERS**



Prof Amit Chattopadhyay Ph.D. (University of Groningen)



Prof Amit Prakash FPM (IIM Bangalore)



Prof Amrita Mishra Ph.D. (IIT Kanpur)



Prof Ashish Choudhury Ph.D. (IIT Madras)



Prof Badrinath Ramamurthy Ph.D. (Rensselaer Polytechnic Institute, NY USA)



Prof Balaji Parthasarathy Ph.D. (University of California Berkeley)



Prof Balakrishnan Ashok Ph.D. (University of Massachusetts Amherst)



Prof Bidisha Chaudhuri Ph.D. (Universität Heidelberg)



Prof Chandrashekar Ramanathan Ph.D. (Mississippi State University)



Prof Debabrata Das Ph.D. (IIT Kharagpur)



Prof Dinesh Babu Jayagopi Ph.D. (École Polytechnique Fédérale de Lausanne)



Prof G N Srinivasa Prasanna Ph.D. (Massachusetts Institute of Technology)



Prof Janaki Srinivasan Ph.D. (University of California Berkeley)



Prof Jaya Sreevalsan Nair Ph.D. (University of California Davis)



Prof Jyotsna Bapat Ph.D. (Pennsylvania State University)



Prof Kurian Polachan Ph.D. (IISc Bangalore)



Manikandan R R Ph.D. (IISc Bangalore)



Prof Madhav Rao Ph.D. (University of Alabama)



Prof Manisha Kulkarni Ph.D. (IMSc Chennai)



Prof Meenakshi D'Souza Ph.D (IMSc Chennai)



Prof Nanditha Rao Ph.D. (IIT Bombay)



Prof Pradeesha Ashok Ph.D. (IISc Bangalore)



Prof Preeti Mudliar Ph.D. (University of Texas at Austin)



Prof Prem Singh Ph.D. (IIT Kanpur)



Prof Priyanka Das Ph.D. (IISc Bangalore)



Raghuram Bharadwaj Ph.D. (IISc Bangalore)



**Prof Sachit Rao** Ph.D. (Ohio State University)



Prof Shiva Kumar Malapaka Ph.D. (Universitat Bayreuth)



Prof Srinivas Vivek Ph.D. (University of Luxembourg)



**Prof Shrisha Rao** Ph.D. (University of Iowa)



Prof Srinath Srinivasa Ph.D. (Brandenburg Technical University Cottbus)



**Prof Subajit Sen** Ph.D. (University of Waterloo)



Prof Subir Kumar Roy Ph.D. (IIT Bombay)



Prof Sujit Kumar Chakrabarti Ph.D. (IISc Bangalore)



Prof T K Srikanth Ph.D. (Cornell University)



Prof Thangaraju B Ph.D. (Bharathidasan University)



Prof Uttam Kumar Ph.D. (IISc Bangalore)



Prof V Ramasubramanian Ph.D. (TIFR Bombay)



Prof V N Muralidhara Ph.D. (IIT Delhi)



Prof V Sridhar Ph.D. (University of Iowa)



Prof Vinod Veera Reddy Ph.D. (Nanyang Technological University Singapore)





Prof Vinu E Venugopal Ph.D. (IIT Madras)

### **DOMAIN-WISE FACULTY MEMBERS**

### **Computer Science Faculty**

- 👉 Prof. Ashish Choudhury
- 👉 Prof. Badrinath Ramamurthy
- 👉 Prof. Chandrashekar Ramanathan
- 👉 Prof. Meenakshi D'Souza
- 👉 Prof. Pradeesha Ashok
- 👉 Prof. Raghuram Bharadwaj
- 👉 Prof. Sachit Rao
- 👉 Prof. Shrisha Rao
- 👉 Prof. Srinivas Vivek
- 👉 Prof. Sujit Kumar Chakrabarti
- 👉 Prof. Thangaraju B
- 👉 Prof. V N Muralidhara

### Networking, Communication & Signal Processing Faculty

- 👉 Prof. Amrita Mishra
- 👉 Prof. Debabrata Das
- 👉 Prof. Dinesh Babu Jayagopi
- 👉 Prof. Jyotsna Bapat
- 👉 Prof. Prem Singh
- 👉 Prof. Priyanka Das
- 👉 Prof. V Ramasubramanian
- 👉 Prof. Vinod Veera Reddy

### **Software Engineering Faculty**

- 👉 Prof B. Thangaraju
- 👉 Prof Chandrashekhar Ramanathan
- 👉 Prof Meenakshi D'Souza
- 👉 Prof Sujit Kumar Chakrabarti

#### **Data Sciences Faculty**

- 👉 Prof. Amit Chattopadhyay
- 👉 Prof. Chandrashekar Ramanathan
- 👉 Prof. Dinesh Babu Jayagopi
- 🖝 Prof. Jaya Sreevalsan Nair
- 🖝 Prof. Raghuram Bharadwaj
- 👉 Prof. Srinath Srinivasa
- 👉 Prof. T K Srikanth
- 👉 Prof. Uttam Kumar
- 👉 Prof. V Ramasubramanian
- 👉 Prof. Vinu E Venugopal
- 👉 Prof. Viswanath Gopalakrishnan

### **VLSI Systems Faculty**

- 👉 Prof. Kurian Polachan
- 👉 Prof. Madhav Rao
- 🖝 Prof. Manikandan R R
- 👉 Prof. Nandita Rao
- 🖝 Prof. Subir Kumar Roy

### Information Technology & Society Faculty

- 👉 Prof. Amit Prakash
- 👉 Prof. Balaji Parthasarathy
- 👉 Prof. Bidisha Chaudhuri
- 👉 Prof. Janaki Srinivasan
- 👉 Prof. Preeti Mudliar
- 👉 Prof. V Sridhar

### **Mathematics & Basic Sciences Faculty**

- 👉 Prof. Balakrishnan Ashok
- 👉 Prof. Manisha Kulkarni
- 👉 Prof. Shiva Kumar Malapaka

### **KEY OFFICIALS**





Prof Debabrata Das Director, IIIT-B



Prof Chandrashekar Ramanathan Professor & Dean (Academics)



Prof Shrisha Rao Professor & Dean (Faculty)



Prof Srinath Srinivasa Professor & Dean (R&D)



Prof Manisha Kulkarni Professor, Dean (Student Affairs)



Cmde SR Sridhar (Retd) Registrar, IIIT-B - Secretary to the Board and Outreach Head



J P Patil Chief Administration Officer



S Piramanayagam Chief Finance Officer



Prof S S Prabhu Faculty Advisor





Prof Meenakshi D'Souza Professor & M.S. Ph.D. Programme Coordinator



Prof Sachit Rao Associate Professor, M.Tech Programme Coordinator, Facultyin-charge Student Exchange



Prof Bidisha Chaudhuri Associate Professor & MSc (DT) Programme Coordinator



**Prof Madhav Rao** Associate Professor, Faculty-incharge-labs



Prof Nanditha Rao Assistant Professor & Warden (Women's Hostel)



Prof Shiva Kumar Malapaka Assistant Professor & Warden (Men's Hostel)



Prof Amrita Mishra Assistant Professor & Associate Warden (Women's Hostel)





Prof T K Srikanth Professor & Faculty-in-charge Computing



Prof Uttam Kumar Assistant Professor & Warden (Men's Hostel)



**Prof V Sridhar** Professor & Faculty In-Charge, Continuing Professional Education, Institutional Finance



Prof Balakrishnan Ashok Associate Professor & Facultyin-charge Library



Prof Dinesh Babu Jayagopi Associate Professor & Facultyin-charge Internships & Placements



Pradeesha Ashok Assistant Professor and Controller of Examinations



Cynthia DMello Staff Officer- Deans office



M K Durai Murugan Senior Manager- IT & IS



Executive Officer (R&D)



Col A Shreenath Chief Executive Officer, Innovation Centre



Ramadevi S Librarian and Manager -Information Services

### RESEARCH ADVISORY COMMITTEE (RAC) MEMBERS



Dr. P Satish Chandra



Prof P Balaram

### **OMBUDSMAN**





**Dr. K. N. Balasubramanya Murthy**, Vice Chancellor of Dayananda Sagar University, Bangalore, and Chairman, Board for IT Education Standards (BITES) took over as **Ombudsman** of IIIT-B on February 26, 2020.



International Institute of Information Technology Bangalore

## **APPOINTMENTS & ADIEU**





### WELCOME ON BOARD



SI. No	Name	Designation	Date of Joining
1	Ms Raksha N	Admin Associate (CPE)	September 05, 2022
2	Col Shreenath A	CEO, Innovation Center	September 26, 2022
3	Ms Nivedhitha M	Assistant Accountant (CPE)	October 10, 2022
4	Ms Praseena MS	Women's Gym Instructor	October 10, 2022
5	Prof Raghuram Bharadwaj Diddigi	Assistant Professor	December 15, 2022
6	Prof Kurian Polachan	Assistant Professor	December 21, 2022
7	Mr Harthish Patil	Admin Associate (CPE)	January 02, 2023
8	Prof Ishu Gupta	Ramanujam Fellow	February 06, 2023
9	Ms Anita Kumari Yadav	Student Activities Associate	February 13, 2023
10	Mr Harish Kumar K	Staff Officer to Director	March 03, 2023
11	Prof Manikandan R R	Assistant Professor	March 27, 2023

### ADIEU



SI. No	Name	Designation	Date of Joining	Date of Leaving
1	Prof Nikhil Krishnan M	Assistant Professor	July 01, 2021	August 31, 2022
2	Ms Debasmita Behera	Cultural Activities Coordinator	October 17, 2019	December 14, 2022
3	Ms Aradhana Chowta	Admin Associate (CPE)	December 01, 2020	December 02, 2022
4	Mr Bishan Suri	Assistant Manager (Purchase and Stores)	November 01, 2015	February 28 2023
5	Ms Aparna T R	Lab In-charge	February 09, 2022	March 31, 2023
6	Mr Niranjan Anil Shanbhag	Technical Assistant	October 01, 2021	May 31, 2023
7	Prof G N Srinivasa Prasanna	Professor	February 18, 2004	June 30, 2023
8	Prof Subhajit Sen	Associate Professor	June 03, 2013	June 30, 2023
9	Prof Neelam Sinha	Associate Professor	June 15, 2011	July 07, 2023
10	Mr Ramesh Sundararaman	Chief Innovation Officer	April 01, 2014	July 31, 2023



International Institute of Information Technology Bangalore

### **RESEARCH PROJECTS**







IIIT-B's research mainly focusses on its contribution to the IT world by emphasizing on education and research, entrepreneurship, and innovation in the related fields. The research centres at IIIT-B are multidisciplinary in nature with the participation of faculty members from across different research domains. The centres act as hub for research activities both related to a specific field like health care or a general areas such as machine intelligence. These centres run by faculty and driven by students and staff, enjoys active support and collaborations from academia, government, and the industry. Few of the highly impactful ongoing research work at IIIT-B are listed below:

National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS) Ministry of Science & Technology, Department of Science & Technology, Government of India

ADVANCED COMMUNICATION	Principal Investigator:	Sponsor:
SYSTEMS	Prof Jyotsna Bapat	Ministry of Science and Technology, Gol

NMICPS - Centre spearheading the activities in the area of Advanced Communication Systems and other domains in the field of Information Technology

#### Duration: 05 yrs. Funds: 150 crores

Cyber Physical System (CPS) refers to a platform comprising of a mechanical system that is controlled by computer algorithms, and tightly integrated with Internet and to its networked users. Here, the physical-mechanical components represented by smart sensors and actuators, and the software components

represented by computing and networking devices are intrinsically intertwined in the platform. Wireless sensors and actuators connected by the Internet-of-Things (IoT) are central to the design of advanced cyber physical systems (CPSs).



#### **CENTRE FOR INTERNET OF ETHICAL THINGS (CIET)**

Collaborators: ELCITA, as a part of its Smart City Expert Committee.

Create Ethics framework in the application of Artificial Intelligence (AI) and Internet of Technologies (IoT) particularly in the field of agriculture, education, health, manufacturing, and smart cities. Duration: 05 yrs. Funds: 22.92 crores

	MODULAR OPEN S	IODULAR OPEN SOURCE IDENTITY PLATFORM (MOSIP)		
	Principal Investigat	tor: Sponsors:		
	Prof Rajagopalan	Bill and Melinda gates Foundation,		
		Tata Trust, Omidyar Network and		
17051P		Nordic Fund		
	•	Start Date: 27 Aug 2018.		
Purpose: To Build a Foundational Digital ID for Financial		Early Adoptors: Morocco and Philipines.		
		Project is recognised by many countries ar		
inclusion.		implemented in Srilanka.		

Project Extended till 31<sup>st</sup> August 2025.



#### **E-HEALTH RESEARCH CENTRE (EHRC)**

- An interdisciplinary Research Center for applied research in the use of Information & Communication Technologies (ICTs) to meet healthcare needs of the under-served and marginal population groups in India and similar regions across the world
- Thematic areas of interest: Malnutrition, Disability and Mental Health
- Recent contribution: E-Manas, DHMP and Implementation and Support for an Interactive Voice Response (IVR) System for a National Public Health Initiative



#### MACHINE INTELLIGENCE AND ROBOTICS (MINRO)

- A "best-in-class" center of excellence in Karnataka for Machine Intelligence and Robotics
- Research areas involved : Healthcare, Education technology, Speech, Smart city/Urban Mobility, Robotics and Policy & Governance.
- 07 New projects initiated in 2020-21.



CENTRE FOR OPEN DATA RESEARCH (CODR)Principal Investigator:Sponsor:Prof Srinath SrinivasaGoKDuration : 05 yrsFunds : 6.96 crores

The Centre for Open-Data Research is aimed at promoting open-data utilisation through data science research outputs, tools and techniques with an objective to apply the results towards progressing human development or enhancing customer consumption experience. Open-Data is defined as data that is freely available for access, reuse, redistribution for everyone without any restrictions IIIT-Bangalore is spearheading the design, development, implementation, and deployment of the Proof-of-Concept (PoC) of a data-driven, analytics-enabled Policy Support System (PSS), named Karnataka Data Lake for evaluation by the Department of Planning, Programme Monitoring and Statistics (DPPMS), Government of Karnataka (GoK). Recently, it became part of the GoK DSS website Avalokana: https:// avalokana.karnataka.gov.in/DataLake/DataLake



FAIRWORK PROJECT Principal Investigator:

Prof Balaji

Parthasarathy Sponsor: University of Oxford

Fairwork, at its essence, is a way of imagining a different, and fairer, platform economy than the one we have today. By evaluating digital platforms against measures of fairness in labour practices, we hope to not just show what the platform economy is, but also what it can be.



#### **CENTER FOR e-GOVERNANCE (CeG)**

Principal Investigator:Sponsor:Prof RamanathanGoKChandrashekarDuration: 05 yearsFunds : 9.68 crores

Centre for Technology Research and Innovation for Digital Governance established – 02 Sep 2022

Key Purpose

- Research and Pilot projects on new ideas/ emerging software technologies and architecture principles
- Create SANDBOX / LAB driven approach to identify and validate use cases in different domain of government.
- Build Emerging technology skills and Capabilities for Software Engineering, Data

Science, ML OPS, DevOps, Cloud and Networking to scale the CEG initiatives/ Programs.

- Standardisation of Application Development and Maintenance Life Cycles
- Design and Rollout Training Programs covering emerging technologies, Process reengineering and e-Governance Best Practices

### INDIA URBAN DATA EXCHANGE

Principal Investigator: Prof Srinath Srinivasa

#### Sponsor:

Ministry of Housing and Urban Affairs & Ministry of Information and Electronics Technology

Indian cities need secure and controlled sharing of all types of data. IUDX is developed, maintained and operated by a dedicated team, based in IISc. As a complement to IUDX, IISc has launched the IUDX research program to explore aspects of data science, privacy & security, economics, policy and regulations that will facilitate the use of data for public good.



#### **PROJECT VICT**

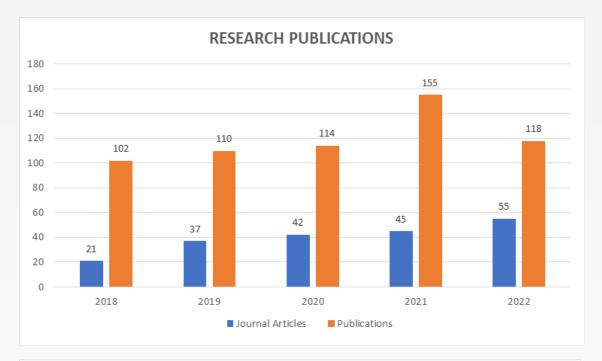
Principal Investigator: Prof Amit Prakash

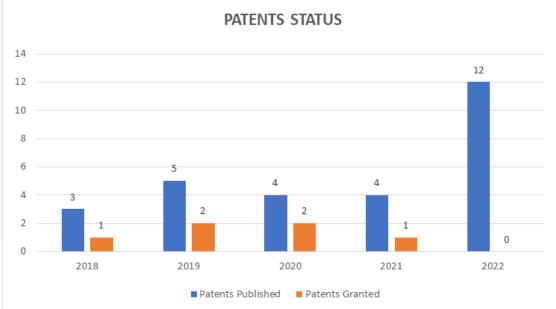
#### Sponsor:

Microsoft Research Lab India Pvt Ltd & Microsoft Corporation (India) Private Limited

IIIT-B seeks to jointly implement the VICT Project with Microsoft, the proposal for which was submitted in partnership with Vision Empower (VE), a not-for-profit enterprise incubating in the IIIT-B Innovation Centre, aimed at empowering visually impaired students of K-12 grades by digitally skilling them, and redefining and updating the Computational Thinking curriculum/course in India, and empowering visually impaired students to access the corresponding modified accessible content identified for the curriculum.

### **RESEARCH OUTCOMES**





Year	Patent Published	No. of Granted	Grant No.
2018	3	1	US 10,129,294 B2
2019	5	2	Indian Patent No. 324646; US 10,255,299 B2
2020	4	2	Indian Patent No. 36459; US 10,706,857
2021	5	1	Indian Patent No: 364591
2022	13	2	Indian Patent No. 409280; Indian Patent No: 410659



International Institute of Information Technology Bangalore

## PUBLICATIONS





### CONFERENCE PUBLICATIONS

Livia Norström, Shiv Ganesh, Preeti Mudliar, Juho Lindman and Anna Sigridur Islind, "Beyond Social Auditing: Towards self-governance and empowerment of Textile workers," in Proc. 45<sup>th</sup> Information Systems Research Seminar in Scandinavia, Helsinge; Denmark, August 14-17, 2022, 6p.

doi: https://irisscis2022.cbs.dk/wp-content/ uploads/2022/06/IRIS\_45\_paper\_23.pdf

Rachna Kedigehalli, Rachapudi Maruthi Sriram, Supreeth Varadarajan, Srinivas Vivek and Sachit Rao, "Revealing parameters of Control Policies Encrypted using Multiplicative Homomorphic Encryption schemes," in Proc. IEEE Conference on Control Technology and Applications (CCTA), Trieste; Italy, August 22-25, 2022, pp. 875-880.

doi: https://doi.org/10.1109/CCTA49430.2022.9966177

Parinit Angadi, Saffron Anas and Sachit Rao, "Developing an NN-MPC DC Motor platform for an Online Real-time Laboratory," in Proc. IEEE Conference on Control Technology and Applications (CCTA), Trieste; Italy, August 22-25, 2022, pp. 1117-1122.

doi: https://doi.org/10.1109/CCTA49430.2022.9966140

Santosh Kumar Upadhyaya and Srinivas Vivek, "Revisiting a Privacy-Preserving Location-based Service Protocol using Edge Computing," in Proc. 17<sup>th</sup> International Conference on Availability, Reliability and Security (ARES 2022), Vienna; Austria, August 23 - 26, 2022, pp. 1-5.

doi: https://doi.org/10.1145/3538969.3544432

Dhanya Eledath, Tirthankar Banerjee, V Ramasubramanian, Narasimha Rao Thurlapati and V Pavithra, "Few-shot learning for E2E speech recognition: Architectural variants for support set generation," in Proc. 30<sup>th</sup> European Signal Processing Conference (EUSIPCO 2022), Belgrade; Serbia, August 29, 2022 – September 2, 2022, pp. 444-448.

doi: https://eurasip.org/Proceedings/Eusipco/ Eusipco2022/pdfs/0000444.pdf

Gopika Gopan K, Neelam Sinha and Dinesh Babu Jayagopi, "Inter-channel Covariance Matrices based analyses of EEG baselines," in Proc. 30<sup>th</sup> European Signal Processing Conference (EUSIPCO 2022), Belgrade; Serbia, August 29, 2022 – September 2, 2022, pp. 1303-1307. doi: https://eurasip.org/Proceedings/Eusipco/ Eusipco2022/pdfs/0001303.pdf

Omkar G Ratnaparkhi and Madhav Rao, "ESAS: Exponent Series based Approximate Square Root Design," in Proc. 25<sup>th</sup> Euromicro Conference on Digital System Design (DSD), Maspalomas; Spain, August 31 - September 02, 2022, pp. 39-45. doi: https://doi.org/10.1109/DSD57027.2022.00015

Veerendra S Devaraddi and Nanditha Rao, "An FPGA based Tiled Systolic Array Generator to accelerate CNNs," in Proc. 25<sup>th</sup> Euromicro Conference on Digital System Design (DSD), Maspalomas; Spain, August 31 - September 02, 2022, pp. 316-323.

doi: https://doi.org/10.1109/DSD57027.2022.00050

Amrita Mishra, D. Abheeshek, Kehariom Dewangan and Chaitanya Yendru, "Joint Sparse Channel and Clipping Level estimation in OFDM-based IoT Networks: A Bayesian learning approach," in Proc. IEEE 33<sup>rd</sup> Annual International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), Kyotol; Japan, September 12--15, 2022, pp. 463-468.

### doi: https://doi.org/10.1109/ PIMRC54779.2022.9978113

Pooja Bassin, Srinath Srinivasa and Sridhar Mandyam, "A Data-driven Approach for Supporting Policy Intervention in Sustainable Development," in Proc. 10<sup>th</sup> Annual International Conference on Sustainable Development (ICSD), Rome; Italy, September 19-20, 2022, 9p.

doi: https://ic-sd.org/wp-content/uploads/2022/11/ submission\_357.pdf

Pon Deepika, Prasad Sistla, Ganesh Subramaniam and Madhav Rao, "Deep Learning based Automated Screening for Intracranial hemorrhages and GRAD-CAM visualizations on Non-Contrast Head Computed Tomography volumes," in Proc. IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI), Ioannina; Greece, September 27-30, 2022, 5p.

doi: https://doi.org/10.1109/BHI56158.2022.9926782

Swapnil Shrivastava and T K Srikanth, "A Framework for Secure and Privacy Preserving Health Data Exchange across Health Information Systems using a Digital Identity System," in Proc. 15<sup>th</sup> International Conference on Theory and Practice of Electronic Governance (ICEGOV 2022), Guimarães; Portugal October 4 - 7, 2022, pp. 41-49.

doi: https://doi.org/10.1145/3560107.3560115

VV Gowripeddi, GVK Sasirekha, Jyotsna Bapat and Debabrata Das, "Digital Twin for Smart Factory Network QoS Enhancement experiments," in Proc. Information and Communication Technology for Competitive Strategies (ICTCS 2022), Chandigarh; India, October 9-10, 2022, 213-228p.

doi: https://doi.org/10.1007/978-981-19-9638-2\_19

Sanjaya M V and Madhav Rao, "An hardware accelerator design of Mobile-Net model on FPGA," in Proc. 2<sup>nd</sup>. International Conference on AI-ML Systems, Bangalore; India, October 12 - 15, 2022, 9p. doi: https://doi.org/10.1145/3564121.3564124

Darshil Shah, Meghna Govind, Gopika Gopan K and Neelam Sinha, "Deep Learning Based EEG Analysis Using Video Analytics," in Proc. IEEE International Conference on Image Processing (ICIP), Bordeaux, France, October 16-19, 2022, pp. 536-540. doi: https://doi.org/10.1109/ICIP46576.2022.9897393

Jeba Berlin S, Deepak Pandian, Shyam Sundar Rajagopalan and Dinesh Babu Jayagopi, "Detecting a Child's Stimming behaviours for Autism Spectrum Disorder diagnosis using Rgbpose-Slowfast Network," in Proc. IEEE International Conference on Image Processing (ICIP), Bordeaux; France, October 16-19, 2022, pp. 3356-3360.

doi: https://doi.org/10.1109/ICIP46576.2022.9897867

Pooja Bassin, "Network Learning on Open Data to aid policy making," in Proc. 41<sup>st</sup> International Conference on Conceptual Modeling (ER 2022), Hyderabad; India, October 17-20, 2022.

doi: http://ceur-ws.org/Vol-3211/CR\_098.pdf

Indu Solomon, Senthilnath Jayavelu, Md Meftahul Ferdaus and Uttam Kumar, "Data Oversampling with Structure Preserving Variational Learning," in Proc. 31<sup>st</sup> ACM International Conference on Information and Knowledge Management (CIKM '22), Atlanta; USA October 17 - 21, 2022, pp. 4490-4494. doi: https://doi.org/10.1145/3511808.3557575

H C Prashant and Madhav Rao, "SOMALib: Library of Exact and Approximate activation functions for Hardware-efficient Neural Network Accelerators," in Proc. IEEE 40<sup>th</sup> International Conference on Computer Design (ICCD), Olympic Valley; USA, October 23-26, 2022, pp. 746-753.

doi: https://doi.org/10.1109/ICCD56317.2022.00114

O. Aishwarya, "Performing Qualitative Data Analysis as a Blind Researcher: Challenges, Workarounds and Design Recommendations," in Proc. 24<sup>th</sup> International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '22), Athens; Greece, October 23 - 26, 2022, 4p.

doi: https://doi.org/10.1145/3517428.3551356

Maryam Bandukda, Giulia Barbareschi, Aneesha Singh, Dhruv Jain, Maitraye Das, Tamanna Motahar, Jason Wiese, Lynn Cockburn, Amit Prakash, David Frohlich and Catherine Holloway, "A Workshop on Disability Inclusive Remote Co-Design," in Proc. 24<sup>th</sup> International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '22), Athens; Greece, October 23 - 26, 2022, 5p.

doi: https://doi.org/10.1145/3517428.3550403

Chakka Sai Pradeep and Neelam Sinha, "Fused Multilayer Layer-CAM Fine-Grained Spatial seature supervision for Surgical Phase Classification using CNNs," in Proc. European Conference on Computer Vision (ECCV 2022), Tel Aviv; Israel, October 23–27, 2022, pp. 712–726.

doi: https://doi.org/10.1007/978-3-031-25075-0\_48

Jaya Sreevalsan-Nair and Astha Jakher, "CAP-DSDN: Node Co-association prediction in Communities in Dynamic Sparse Directed Networks and a Case Study of Migration Flow," in Proc. 14<sup>th</sup> International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management (IC3K 2022), Valletta; Malta, October 24-26, 2022, pp. 63-74. doi: https://doi.org/10.5220/0011537600003335

Prashanth H. C. and Madhav Rao, "Improving Digital Circuit synthesis of Complex Functions using Binary Weighted fitness and variable mutation rate in Cartesian Genetic Programming," in Proc. 14<sup>th</sup> International Joint Conference on Computational Intelligence (IJCCI), Valletta; Malta, October 24-26, 2022, pp. 112-120. doi: https://doi.org/10.5220/0011539000003332

Ajay B S, Sumedh R. Risbud and Madhav Rao, "NC-Emotions: Neuromorphic hardware accelerator design for facial emotion recognition," in Proc. 29<sup>th</sup> IEEE International Conference on Electronics, Circuits and Systems (ICECS), Glasgow; United Kingdom, October 24-26, 2022, pp. 1-4. doi: https://doi.org/10.1109/

ICECS202256217.2022.9970828

Nandagopal R, Rajashree V and Madhav Rao, "Accelerated Piece-Wise-Linear Implementation of Floating-Point Power function," in Proc. 29<sup>th</sup> IEEE International Conference on Electronics, Circuits and Systems (ICECS), Glasgow; United Kingdom, October 24-26, 2022, pp. 1-4.

doi: https://doi.org/10.1109/ ICECS202256217.2022.9970828

Mayank Kabra, Prashanth H C and Madhav Rao, "Design and Evaluation of Performance-efficient SoC-on-FPGA for Cloud-based Healthcare applications," in Proc. IEEE Nordic Circuits and Systems Conference (NorCAS), Oslo; Norway, October 25-26, 2022, pp,.

doi: https://doi.org/10.1109/norcas57515.2022.9934217

Jagan P, Sasirekha GVK, Madhav Rao, Jyotsna Bapat and Debabrata Das, "Electro-Mechanical Design of Sensor-Hub for Indoor Smart Irrigation: System Prototype," in Proc. 2022 IEEE Sensors, Dallas; USA, October 30-November 2, 2022, 4p. doi: https://doi.org/10.1109/

SENSORS52175.2022.9967067

Madhav Pasumarthy, Rutvi Padhy, Raghuveer Yadav, Ganesh Subramaniam and Madhav Rao, "An Indian Currency recognition model for assisting Visually impaired individuals," in Proc. IEEE International Conference on Recent Advances in Systems Science and Engineering (RASSE), Tainan, Taiwan, November 7-10, 2002,.

doi: https://doi.org/10.1109/ RASSE54974.2022.9989624

Jinal Hitesh Thakkar, Pooja S B. Rao, Kumar Shubham, Vaibhav Jain and Dinesh Babu Jayagopi, "Understanding Interviewees' perceptions and behaviour towards verbally and non-verbally Expressive Virtual Interviewing Agents," in Proc. International Conference on Multimodal Interaction (ICMI '22 Companion), Bengaluru; India, November 7-11, 2022, pp. 61-69.

doi: https://doi.org/10.1145/3536220.3558802

Kumar Shubham, Anirban Mukherjee and Dinesh Babu Jayagopi, "Review of realistic behavior and appearance generation in embodied conversational agents: A comparison between traditional and modern approaches," in Proc. International Conference on Multimodal Interaction (ICMI '22), Bengaluru; India, November 7 - 11, 2022, pp. 191–197.

doi: https://doi.org/10.1145/3536221.3556592

Balaji Parthasarathy, "From the Cooperative to the Coercive: Digital Platforms and the Antinomies of

CSCW," in Proc. Computer Supported Cooperative Work and Social Computing (CSCW '22), Taiwan, November 8 - 22, 2022, pp.1-2. doi: https://doi.org/10.1145/3500868.3559478

Shyam Murthy and Srinivas Vivek, "Passive Triangulation Attack on Oride," in Proc. 21<sup>st</sup> International Conference on Cryptology and Network Security (CANS 2022), Abu Dhabi; United Arab Emirates, November 13–16, 2022m pp 167–187. doi: https://doi.org/10.1007/978-3-031-20974-1\_8

Asoke K. Talukder, Erwin Selg and Roland E. Haas, "Physicians' Brain Digital Twin: Holistic Clinical & Biomedical Knowledge Graphs for Patient Safety and Value-based care to prevent the Post-pandemic Healthcare e+G38cosystem Crisis," in Proc. 4<sup>th</sup> Iberoamerican Conference and third Indo-American Conference, (Knowledge Graphs and Semantic Web (KGSWC 2022), Madrid; Spain, November 21–23, 2022, pp. 32-46.

doi: https://doi.org/10.1007/978-3-031-21422-6

Ravi Shankar, Sasirekha GVK, Chandrashekar Ramanathan and Jyotsna Bapat, "Knowledge-based Digital Twin for Oil and Gas 4.0 Upstream Process: A System p+G39rototype," in Proc. International Conference on Internet of Things and Intelligence Systems (IoTalS), Bali; Indonesia, November 24-26, 2022, pp. 344-350.

doi:https://doi.org/10.1109/IoTalS56727.2022.9975974

Vandana M. Ladwani and V. Ramasubramanian, "M-ary Hopfield neural network for storage and retrieval of variable length sequences: Multi-limit cycle approach," in Proc. EEE Symposium Series on Computational Intelligence (SSCI), Singapore, December 4-7, 2022.

doi: https://doi.org/10.1109/ SSCI51031.2022.10022082 Apurva Kulkarni, Pooja Bassin, Niharika Sri Parasa, Vinu E. Venugopal, Srinath Srinivasa and Chandrashekar Ramanathan, "Ontology Augmented Data Lake System for Policy Support," in Proc. Big Data Analytics in Astronomy, Science, and Engineering 2022 (BDA 2022), Aizu; Japan, December 5–7, 2022, pp. 6-13.

doi: https://doi.org/10.1007/978-3-031-28350-5\_1

Swasti Shreya Mishra, Kumar Shubham and Dinesh Babu Jayagopi, "A Hybrid Rigid and Non-Rigid Motion Approximation for Generating Realistic Listening Behavior Videos," in Proc. 13<sup>th</sup> Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP '22), Gandhinagar; India December 8 - 10, 2022, 8p.

doi: https://doi.org/10.1145/3571600.3571633

Ravi Kiran Reddy Kotlo Budde, Kumar Shubham, Gopalakrishnan Venkatesh, Sriram Gandikota, Sarthak Khoche, Dinesh Babu Jayagopi and Gopalakrishnan Srinivasaraghavan, "One shot learning in StyleALAE: Preserving facial identity during semantic modification," in Proc. 13<sup>th</sup> Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP '22), Gandhinagar India December 8 - 10, 2022, 7p.

doi: https://doi.org/10.1145/3571600.3571617

VV Gowripeddi, GVK Sasirekha, Jyotsna Bapat and Debabrata Das, "Digital Twin for Smart Factory Network QoS Enhancement Experiments," in Proc. Information and Communication Technology for Competitive Strategies (ICTCS 2022), Chandigarh; India, December 9-10, 2022, 213-228p. doi: https://doi.org/10.1007/978-981-19-9638-2 19

Shyam Murthy and Srinivas Vivek, "Driver Locations Harvesting Attack on pRide," in Proc. 16<sup>th</sup> International Conference on Network and System Security (NSS 2022), Denarau Island; Fiji, December 9–12, 2022, pp. 633-648.

doi: https://doi.org/10.1007/978-3-031-23020-2\_36

Ananya Appan, Anirudh Chandramouli and Ashish Choudhury, "Revisiting the efficiency of Perfectly Secure Asynchronous Multi-party Computation against General Adversaries," in Proc. 23<sup>rd</sup> International Conference on Cryptology in India, Progress in Cryptology (INDOCRYPT 2022), Kolkata; India, December 11–14, 2022, pp. 223-248. doi: https://doi.org/10.1007/978-3-031-22912-1\_10

Kumar Shubham, Laxmi Narayen Nagarajan Venkatesan, Dinesh Babu Jayagopi and Raj Tumuluri, "Multimodal Embodied Conversational Agents: A discussion of architectures, frameworks and modules for commercial applications," in Proc. IEEE International Conference on Artificial Intelligence and Virtual Reality (AIVR), CA; USA, December 12-14, 2022 pp. 36-45.

doi: https://doi.ieeecomputersociety.org/10.1109/ AIVR56993.2022.00013

Alavala Venkata Suraj, Shaik Mohammed Waseem and Subir Kumar Roy, "Resource Constrained Hardware Architecture for Training Deep Neural Networks at the Edge - FPGA Implementation," in Proc. IEEE International Symposium on Smart Electronic Systems (iSES), Warangal; India, December 18-22, 2022, pp. 358-361.

doi: https://doi.org/10.1109/iSES54909.2022.00079

Soujanya S R and Madhav Rao, "Hardware characterization of Integer-Net based seizure detection models on FPGA," in Proc. 2022 IEEE 15<sup>th</sup> International Symposium on Embedded Multicore/ Many-core Systems-on-Chip (MCSoC), Penang; Malaysia, December 19-22, 2022, pp. 224-231. doi: https://doi.org/10.1109/ MCSoC57363.2022.00043

Asoke Kumar Talukder, E Selg, R Fernandez, TDS Raj, AV Waghmare and Roland E Haas, "Drugomics: Knowledge Graph & Al to construct Physicians' Brain Digital Twin to prevent Drug side-effects and Patient harm," in Proc. International Conference on Big Data Analytics (BDA 2022), Hyderabad; India, December 19–22, 2022, pp.149-158.

doi: https://doi.org/10.1007/978-3-031-24094-2\_10

Uttam Kumar, "Semi-supervised Tree Canopy detection and classification of Plant disease using ConvolutionalNeural Network based Transfer Learning Models," in Proc. 13<sup>th</sup> Biennial Lake Symposium: Conservation of Wetlands: Ecosystembased Adaptation of Climate change (Lake 2022), Bangalore; India, December 28-30, 2022.

Anindita Dasgupta and Uttam Kumar, "Impact of Increased Urbanisation on Land Surface Temperature: A Case Study of Bangalore," in Proc. 13<sup>th</sup> Biennial Lake Symposium: Conservation of Wetlands: Ecosystembased Adaptation of Climate change (Lake 2022), Bangalore; India, December 28-30, 2022.

Madhurima Panja, Tanujit Chakraborty, Uttam Kumar and Nan Liuc, "Epicasting: An Ensemble Wavelet Neural Network for forecasting epidemics," in Proc. 13<sup>th</sup> Biennial Lake Symposium: Conservation of Wetlands: Ecosystem-based Adaptation of Climate change (Lake 2022), Bangalore; India, December 28-30, 2022. Rahisha Thottolil and Uttam Kumar, "Cloud Computing for Big Geospatial Data Analysis with Google Earth Engine – Urban Research Applications," in Proc. 13<sup>th</sup> Biennial Lake Symposium: Conservation of Wetlands: Ecosystem-based Adaptation of Climate change (Lake 2022), Bangalore; India, December 28-30, 2022.

Tanujit Chakraborty, "Past, Present and Future of Time Series Forecasting," in Proc. 13<sup>th</sup> Biennial Lake Symposium: Conservation of Wetlands: Ecosystembased Adaptation of Climate change (Lake 2022), Bangalore; India, December 28-30, 2022.

Srravya Chandhiramowuli and Bidisha Chaudhuri, "Match made by Humans: A Critical Enquiry into Human-Machine configurations in Data labelling," in Proc. 56<sup>th</sup> Hawaii International Conference on System Sciences (HICSS), Maui; USA, January 3-6, 2023, pp. 2007-2016.

doi: https://hdl.handle.net/10125/102882

Pavan Iddalagi and Amrita Mishra, "Impact Analysis of Tunnel Probing Protocol on SD-WAN's mainstream traffic," in Proc. 15<sup>th</sup> International Conference on COMmunication Systems & NETworkS (COMSNETS), Bangalore; India, January 3-8, 2023, pp. 252-259. doi: https://doi.org/10.1109/ COMSNETS56262.2023.10041375

Chandrashekar Ramanathan and Apurva Kulkarni, "TSAPI: Enhancing Existing OLTP Databases with Temporal Query Capabilities for Analytics," in Proc. 6<sup>th</sup> Joint International Conference on Data Science & Management of Data (10<sup>th</sup> ACM IKDD CODS and 28<sup>th</sup> COMAD), Mumbai; India January 4 - 7, 2023, pp. 268–271.

doi: https://doi.org/10.1145/3570991.3571069

Venkat Suprabath Bitra, Shweta Verma and B. Tirumala Rao, "Machine Learning and Convolution Neural Network based Trace Identification of Pesticides and Dye Mixtures from Raman Spectra," in Proc. 6<sup>th</sup> Joint International Conference on Data Science & Management of Data (10<sup>th</sup> ACM IKDD CODS and 28<sup>th</sup> COMAD), Mumbai India January 4 - 7, 2023, pp. 268–271.

doi: https://doi.org/10.1145/3570991.3571007

Ashish Choudhury, "Almost-Surely Terminating Asynchronous Byzantine Agreement Against General Adversaries with Optimal Resilience," in Proc. 24<sup>th</sup> International Conference on Distributed Computing and Networking (ICDCN '23), Kharagpur; India, January 4-7, 2023 pp. 167–176.

doi: https://doi.org/10.1145/3571306.3571333

Kumar Murugesan, Srihari Sriram, Kavin Kumar and Muralidhara V N, "Closed WiFi Hotspot - Truly Hidden Network," in Proc. IEEE International Conference on Consumer Electronics (ICCE), Las Vegas; USA, January 6-8, 2023, pp. 1-6. doi: https://doi.org/10.1109/ ICCE56470.2023.10043474

Tushar Vrind, Lalit Pathak and Debabrata Das, "Novel Federated Learning by Aerial-Assisted Protocol for efficiency enhancement in beyond 5G Network," in Proc. IEEE 20<sup>th</sup> Consumer Communications & Networking Conference (CCNC), Las Vegas; USA, January 8-11, 2023, pp. 891-892. doi: https://doi.org/10.1109/ CCNC51644.2023.10059852 Vinay Venumuddala and Manjunath Agalalgurki Nagaraj, "Delivering Industry 4.0 promise to SMEs: Designing an Entrepreneurial opportunity," in Proc. International Conference on Research into Design (ICORD 2023), Bangalore; India, January 9-11, 2023, pp. 1095-1103.

doi: https://doi.org/10.1007/978-981-99-0428-0\_89

Ameena K. Ashraf and Meenakshi D'Souza, "Static Data Race Detection in Multi-Task programs for Industrial Robots," in Proc. 19<sup>th</sup> International Conference on Distributed Computing and Intelligent Technology (ICDCIT 2023), Bhubaneswar; India, January 18–22, 2023, pp. 51-66.

doi: https://doi.org/10.1007/978-3-031-24848-1\_4

Pavan Patil, Ramesh Kestur, Madhav Rao and Aswath, C, "IoT based Data sensing system for AutoGrow, an Autonomous Greenhouse System for Precision Agriculture," in Proc. 1<sup>st</sup> IEEE Applied Sensing Conference (APSCON 2023), Bengaluru; India, January 23-25, 2023, 3p. doi: https://doi.org/10.1109/ APSCON56343.2023.10101100

Sachit Rao, Animesh Chakravarthy and Debasish Ghose, "Manipulation of a Rigid Object in 3-D Space by a pair of UAVs using Sliding Modes," in Proc. AIAA Scitech 2023 Forum, USA, January 23-27, 2023. doi: https://doi.org/10.2514/6.2023-0687

Shivangi Garg, "eChoupal: The Ticker Tape of Agricultural Markets," in Proc. 2023 International Conference on Intelligent and Innovative Technologies in Computing, Electrical and Electronics (IITCEE), Bengaluru; India, January 27-28, 2023, 3p. doi: https://doi.org/10.1109/ IITCEE57236.2023.10090873 Apurva Kulkarni, Chandrashekar Ramanathan and Vinu E. Venugopal, "Ontology Mediated Document Retrieval for Exploratory Big Data Analytics," in Proc. IEEE 17<sup>th</sup> International Conference on Semantic Computing (ICSC), USA, February 1-3. 2023, pp. 100-103.

doi: https://doi.org/10.1109/ICSC56153.2023.00022

Wayne Paul Martis and Sachit Rao, "Cooperative Collision Avoidance in Mobile Robots using Dynamic Vortex Potential Fields," in Proc. 9<sup>th</sup> International Conference on Automation, Robotics and Applications (ICARA), Abu Dhabi; United Arab Emirates, February 10-12, 2023, pp. 60-64.

doi: https://doi.org/10.1109/ ICARA56516.2023.10125851

Sasirekha GVK, Amulya Bangari, Madhav Rao, Jyotsna Bapat and Debabrata Das, "Synthesis of IoT Sensor Telemetry Data for Smart Home Edge-IDS Evaluation," in Proc. International Conference on Computer Science, Information Technology and Engineering (ICCoSITE), Jakarta; Indonesia, February 16, 2023, pp. 562-567.

doi: https://doi.org/10.1109/ ICCoSITE57641.2023.10127781

Jaya Sreevalsan-Nair, "On Metavisualization and Properties of Visualization," in Proc. 18<sup>th</sup> International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (VISIGRAPP), Lisbon; Portugal, February 19-21, 2023, pp. 230-239.

doi: https://doi.org/10.5220/0011794300003417

Venkata Vivek Gowripeddi, Sasirekha GVK, Jyotsna Bapat and Debabrata Das, "Digital Twin and Ontology based DDoS Attack Detection in a Smart-Factory 4.0," in Proc. International Conference on Artificial Intelligence in Information and Communication (ICAIIC), Bali; Indonesia, February 20-23, 2023, pp. 286-291.

doi: https://doi.org/10.1109/ ICAIIC57133.2023.10067049

Sulochan Naik and Meenakshi D'Souza, "Detection of Faults in Microservices using Petri Nets," in Proc. 16<sup>th</sup> Innovations in Software Engineering Conference (ISEC '23), Prayag Raj; India, February 23 - 25, 2023, 5p.

doi: https://doi.org/10.1145/3578527.3578541

Avik Bhatnagar, Pratyush Nandi and Madhav Rao, "Design and evaluation of CNN hardware accelerator designs for in-seat passenger anomaly detection," in Proc. IEEE 14<sup>th</sup> Latin America Symposium on Circuits and Systems (LASCAS), Quito; Ecuador, February 27 -March 3, 2023, pp. 88-91. doi: https://doi.org/10.1109/ LASCAS56464.2023.10108325

Sai Karthik Nandigama, H C Prashanth and Madhav Rao, "Design and evaluation of Inexact computation based Systolic Array for Convolution," in Proc. IEEE 14<sup>th</sup> Latin America Symposium on Circuits and Systems (LASCAS), Quito; Ecuador, February 27 -March 3, 2023, pp. 133-136. doi: https://doi.org/10.1109/ lascas56464.2023.10108234 Praseeda, Monjoy Narayan Choudhury, Bhavjyot Singh Chadha and Srinath Srinivasa, "A Systematic Review of Online Learning Platforms for Computer Science Courses," in Proc. IEEE World Engineering Education Conference (EDUNINE), Bogota; Colombia, March 12-15, 2023, 6p. doi: https://doi.org/10.1109/

#### EDUNINE57531.2023.10102817

Arti Yardi, Vamshi Krishna Kancharla and Amrita Mishra, "Detecting Linear Block Codes via Deep Learning," in Proc. IEEE Wireless Communications and Networking Conference (WCNC), Glasgow; United Kingdom, March 26-29, 2023, pp. 1-6. doi: https://doi.org/10.1109/ WCNC55385.2023.10118805

Harshita Gupta, Mayank Kabra, Nitin D Patwari, Prashanth H C and Madhav Rao, "Design and Evaluation of multipliers for hardware accelerated onchip EdDSA," in Proc. 24<sup>th</sup> International Symposium on Quality Electronic Design (ISQED), San Francisco; USA, April 5-7, 2023, pp. 24-32.

doi: https://doi.org/10.1109/ ISQED57927.2023.10129381

Mayank Kabra, Prashanth H C, Kedar Deshpande and Madhav Rao, "eDRAM-OESP: A Novel performance Efficient In-embedded-DRAM-compute Design for On-edge Signal Processing Application," in Proc. 24<sup>th</sup> International Symposium on Quality Electronic Design (ISQED), San Francisco; USA, April 5-7, 2023, pp. 165-171.

doi: https://doi.org/10.1109/ ISQED57927.2023.10129307

Mayank Kabra, Prashanth H C, Kedar Deshpande and Madhav Rao, "HIE-DRAM: High-Performance Efficient In-DRAM Computing Architecture for SIMD," in Proc. 24<sup>th</sup> International Symposium on Quality Electronic Design (ISQED), San Francisco; USA, April 5-7, 2023, pp. 180-186. doi: https://doi.org/10.1109/ ISQED57927.2023.10129370

Archie Mishra and Nanditha Rao, "DSEAdd: FPGAbased Design Space exploration for Approximate Adders with Variable Bit-precision," in Proc. 24<sup>th</sup> International Symposium on Quality Electronic Design (ISQED), San Francisco, CA, USA, April 5-7, 2023, pp. 201-208.

doi: https://doi.org/10.1109/ ISQED57927.2023.10129364

Prashanth H C, Sriniketh S S, Shrikrishna Hebbar, Chinmaye R and Madhav Rao, "SQRTLIB: Library of Hardware Square Root Designs," in Proc. 24<sup>th</sup> International Symposium on Quality Electronic Design (ISQED), San Francisco; USA, April 5-7, 2023, pp. 348-352.

doi: https://doi.org/10.1109/ ISQED57927.2023.10129377

Bindu G Gowda, Prashanth H C and Madhav Rao, "Error Diluted Approximate Multipliers using Positive and Negative Compressors," in Proc. 24<sup>th</sup> International Symposium on Quality Electronic Design (ISQED), San Francisco; USA, April 5-7, 2023, pp. 598-604. doi: https://doi.org/10.1109/ ISQED57927.2023.10129376

Mohd Rizwan Shaikh, Madhav Rao and Ganesh Subramaniam, "A Novel Thermal Imaging Based Transfer-Learning Model To Estimate Blood Pressure." in Proc. IEEE 20<sup>th</sup> International Symposium on Biomedical Imaging (ISBI), Cartagena, Colombia, April 18-21, 2023, 5p.

doi: https://doi.org/10.1109/ISBI53787.2023.10230787

P Haribabu, Gvk Sasirekha, Madhav Rao, Jyotsna Bapat, and Debabrata Dss, "RISC-V Core for Ethical Intelligent IoT Edge: Analysis & Design Choice," in Proc. IEEE/ACM 23<sup>rd</sup> International Symposium on Cluster, Cloud and Internet Computing (CCGrid), Bangalore; India, May 01-04, 2023, pp. 110-117. doi: https://doi.org/10.1109/ CCGridW59191.2023.00031

Beth Plale, Preeti Malakar, Meenakshi D'Souza, Hemangee K. Kapoor,Yogesh Simmhan, Ilkay Altintas and Manohar Swaminathan, "CCGRID 2023: A Holistic Approach to Inclusion and Belonging," in Proc. IEEE/ ACM 23<sup>rd</sup> International Symposium on Cluster, Cloud and Internet Computing (CCGrid), Bangalore; India, May 01-04, 2023, pp. 684-685.

doi: https://doi.org/10.1109/ CCGrid57682.2023.00070

Vinay Kulkarni, V. V. Reddy and Avinash Dixit, "Detection of close-proximity automotive targets using LSTM," in Proc. IEEE Radar Conference (RadarConf23), Texas; USA, May 01-05, 2023,6p. doi: https://doi.org/10.1109/RadarConf2351548.2023.10149784

Jayati Deshmukh, Nikitha Adivi and Srinath Srinivasa, "Modeling Application Scenarios for Responsible Autonomy using Computational Transcendence," in Proc. International Conference on Autonomous Agents and Multiagent Systems (AAMAS '23), London; United Kingdom, 29 May 2023- 2 June 2023, pp. 2496-2498.

doi: https://dl.acm.org/doi/ abs/10.5555/3545946.3598980

Jayati Deshmukh, "Emergent Responsible Autonomy in Multi-Agent Systems," in Proc. International Conference on Autonomous Agents and Multiagent Systems (AAMAS '23), London; United Kingdom, 29 May 2023- 2 June 2023, pp. 3029–3031. doi: https://dl.acm.org/doi/ abs/10.5555/3545946.3599161

Beryl Gnanaraj and Jaya Sreevalsan-Nair, "EyeExplore: An Interactive Visualization tool for Eye-Tracking data for novel Stimulus-based analysis," in Proc. 2023 Symposium on Eye Tracking Research and Applications (ETRA '23), Tubingen; Germany, May 29 - Jun 2, 2023, pp. 1-2.

doi: https://doi.org/10.1145/3588015.3590132

Chakka Sai Pradeep, Neelam Sinha and Banibrata Mukhopadhyay, "Measuring Deviation from Stochasticity in Time-Series using Autoencoder based Time-Invariant representation: Application to Black Hole Data," in Proc. IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Rhode Island; Greece, June 4-10, 2023, 5p.

doi: https://doi.org/10.1109/ ICASSP49357.2023.10095755

Nitin D. Patwari , Anjul Srivastav, Mayank Kabra, Prashant Jonna and Madhav Rao, "Design and Evaluation of Finite Field Multipliers Using Fast XNOR Cells," in Proc. Great Lakes Symposium on VLSI 2023 (GLSVLSI' 2023), Knoxville; USA, June 5-7.2023, pp. 163-166.

doi: https://doi.org/10.1145/3583781.3590290

Sai Karthik Nandigama, Bindu G. Gowda, Prashanth H C and Madhav Rao, "EBASA: Error Balanced Approximate Systolic Array architecture design," in Proc. Great Lakes Symposium on VLSI 2023 (GLSVLSI' 2023), Knoxville; USA, June 5-7.2023, pp. 473-476.

doi: https://doi.org/10.1145/3583781.3590296

Bindu G. Gowda, Prashanth H C and Madhav Rao, "IMAC: A Pre-Multiplier and Integrated reduction Based Multiply-And-Accumulate Unit," in Proc. Great Lakes Symposium on VLSI 2023 (GLSVLSI' 2023), Knoxville; USA, June 5-7.2023, pp. 503-508. doi: https://doi.org/10.1145/3583781.3590265

Shivani Shah and Nanditha P. Rao, "MCSim: A Multi-Core Cache Simulator Accelerated on a Resourceconstrained FPGA," in Proc. Great Lakes Symposium on VLSI 2023 (GLSVLSI' 2023), Knoxville; USA, June 5-7.2023, pp. 155-158.

doi: https://doi.org/10.1145/3583781.3590309

Pradeesha Ashok, Sayani Das, Lawqueen Kanesh, Saket Saurabh, Avi Tomar and Shaily Verma, "Burn and Win," in Proc. International Workshop on Combinatorial Algorithms (IWOCA 2023), Tainan; Taiwan, June 7–10, 2023, pp. 36-48. doi: https://doi.org/10.1007/978-3-031-34347-6\_4

Henning Fernau, Florent Foucaud, Kevin Mann, Utkarsh Padariya and K.N. Rajath Rao, "Parameterizing Path Partitions," in Proc. 13<sup>th</sup> International Conference on Algorithms and Complexity (CIAC 2023), Larnaca; Cyprus, June 13–16, 2023, pp. 187-201. doi: https://doi.org/10.1007/978-3-031-30448-4\_14

Anil Kumar, Navdeep, Adarsh Kumar, Smruti Rekha Swain, Ishu Gupta and Ashutosh Kumar Singh, "A Haar-Cascading and Deep Learning Driven Enhanced Mechanism on Cloud Platform for Real-Time Facial Emotion Detection," 5<sup>th</sup> International Conference on Energy, Power and Environment: Towards Flexible Green Energy Technologies (ICEPE), Shillong, India, June 15-17, 2023, pp. 1-6. doi: https://doi.org/10.1109/

ICEPE57949.2023.10201572

Kalyan Varma Nadimpalli, Amit Chattopadhyay and Bastian Rieck, "Euler Characteristic Transform based Topological Loss for Reconstructing 3D Images from Single 2D Slices," in Proc. IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) Workshops, 2023, Vancouver; Canada, June 18-22, 2023, pp. 571-579. doi: https://doi.org/10.1109/ CVPRW59228.2023.00064

S N Raghava, H C Prashanth, Bindu G Gowda, Pratyush Nandi and Madhav Rao, Design-Space Exploration of Multiplier Approximation in CNNs," in Proc. IEEE Computer Society Annual Symposium on VLSI (ISVLSI), Foz do Iguacu, Brazil, June 20-23, 2023, pp. 127-132.

doi: https://doi.org/10.1109/ ISVLSI59464.2023.10238594

Omkar G Ratnaparkhi and Madhav Rao, CWAHA: Cluster-Wise Approximation for Hardware implementation of Arithmetic functions," in Proc. IEEE Computer Society Annual Symposium on VLSI (ISVLSI), Foz do Iguacu, Brazil, June 20-23, 2023, pp. 145-150.

doi: https://doi.org/10.1109/ ISVLSI59464.2023.10238526

Sanampudi Gopala Krishna Reddy, Gogireddy Ravi Kiran Reddy, Vasanthi D R and Madhav Rao, "Design and Evaluation of M-Term Non-Homogeneous Hybrid Karatsuba Polynomial Multiplier," in Proc. IEEE Computer Society Annual Symposium on VLSI (ISVLSI), Foz do Iguacu, Brazil, June 20-23, 2023, pp. 211-216.

doi: https://doi.org/10.1109/ ISVLSI59464.2023.10238681 Harshita Gupta, Mayank Kabra, Asmita Zjigyasu and Madhav Rao, "FastNTT: Design and Evaluation of Modular-Reduction Based Fast NTT Design on FPGA," in Proc. IEEE Computer Society Annual Symposium on VLSI (ISVLSI), Foz do Iguacu, Brazil, June 20-23, 2023, pp. 259-264. doi: https://doi.org/10.1109/ ISVLSI59464.2023.10238638

H C Prashanth, Prashanth Jonna and Madhav Rao,"CellFlow: Automated Standard Cell Design Flow." in Proc. IEEE Computer Society Annual Symposium on VLSI (ISVLSI), Foz do Iguacu, Brazil, June 20-23, 2023, pp. 265-269.

doi: https://doi.org/10.1109/ ISVLSI59464.2023.10238584

Manuj Malik, David Tomás and Paolo Rosso, "How challenging is Multimodal Irony Detection?," in Proc. International Conference on Applications of Natural Language to Information Systems (NLDB 2023), Derby; United Kingdom, June 21–23, 2023, pp. 18-32. doi: https://doi.org/10.1007/978-3-031-35320-8\_2

Jayati Deshmukh, Nikitha Adivi and Srinath Srinivasa, "Resolving the dilemma of Responsibility in Multi-agent Flow Networks," in Proc. International Conference on Practical Applications of Agents and Multi-Agent Systems (PAAMS 2023), Guimarães; Portugal, July 12–14, 2023, pp. 76-87.

doi: https://doi.org/10.1007/978-3-031-37616-0\_7

Janvi Chhabra, Karthik Sama, Jayati Deshmukh and Srinath Srinivasa, "When Extrinsic Payoffs meet Intrinsic Expectations," in Proc. International Conference on Practical Applications of Agents and Multi-Agent Systems (PAAMS 2023), Guimarães; Portugal, July 12–14, 2023, pp. 40-51.

doi: https://doi.org/10.1007/978-3-031-37616-0\_4

Srinivasan Selvaganapathy, Amudheesan Adithan N, Prashant K. Wali, Jyotsna Bapat and Debabrata Das, "Efficient RAN Overload Control Mechanism for NR based mMTC by Dynamic SCMA for RACH," Proc. IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT), Bangalore, India, July 14-16, 2023, pp. 1-6.

doi: https://doi.org/10.1109/ CONECCT57959.2023.10234811

Sharvari Ravindran, Yogita Pimpalkar, Jyotsna Bapat and Debabrata Das, "Multi-User Service Throughput Estimation for Adaptive Resource Management in 5G-Advanced and Beyond Sliced Networks," Proc. IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT), Bangalore, India, July 14-16, 2023, pp. 1-6. doi: https://doi.org/10.1109/ CONECCT57959.2023.10234812

R Rajavelsamy, R Bharath Kumar, Ganesha, S Aswin, Duckey Lee and Debabrata Das, "Novel Differentiated Integrity Protection for Enhancing Performance of Beyond 5G Systems," Proc. IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT), Bangalore, India, July 14-16, 2023, pp. 1-6. doi: https://doi.org/10.1109/ CONECCT57959.2023.10234794

Yogita Pimpalkar, Sharvari Ravindran, Jyotsna Bapat and Debabrata Das, "New Attacks on Cloud Container-Based IoT Systems in 5G-Advanced and Beyond," Proc. IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT), Bangalore, India, July 14-16, 2023, pp. 1-6. doi: https://doi.org/10.1109/

CONECCT57959.2023.10234780

### **JOURNALS & MAGAZINE ARTICLES**

Kaushlendra Sharma, Rajesh Doriya, Saroj Kumar Pandey, Ankit Kumar, G. R. Sinha and Pankaj Dadheech, "Real-Time Survivor Detection System in SaR Missions using Robots," Drones, vol. 6, no. 8, August 2022, Article no. 219.

doi: https://doi.org/10.3390/drones6080219.

Sachit Rao and Shrisha Rao, "Finite-Time consensus for leader-follower and leaderless swarms in the presence of malicious agents," International Journal of Control, Online August 03, 2022. doi: https://doi.org/10.1080/00207179.2022.2106897.

Rohit Prasad, Prageet Aeron and V. Sridhar, "New determinants of spectrum price in a 5G world," Applied Economics, vol. 55, no. 7, pp. 764-782, 2023. doi: https://doi.org/10.1080/00036846.2022.20943 32.

Mudasir Ahmad Sheikh, Prem Singh and Rohit Budhiraja, "Low-Complexity MMSE Receiver Design For Massive MIMO OTFS Systems," IEEE Communications Letters, vol. 26, no. 11, pp. 2759 -2763, November 2022.

doi: https://doi.org/10.1109/LCOMM.2022.3198136.

Srinivas Vivek, Shyam Murthy and Deepak Kumaraswamy, "Integer polynomial recovery from outputs and its application to cryptanalysis of a protocol for secure sorting," Journal of Mathematical Cryptology, vol. 16, no. 1, pp. 255-271, August 2022. doi: https://doi.org/10.1515/jmc-2021-0054.

Vinu Ellampalli Venugopal, Martin Theobald, Damien Tassetti, Samira Chaychi and Amal Tawakuli, "Targeting a Light-Weight and Multi-Channel approach for Distributed Stream Processing," Journal of Parallel and Distributed Computing, vol. 167, pp. 77-96, September 2022.

doi: https://doi.org/10.1016/j.jpdc.2022.04.022.

Sridhar Mandyam Kannappan and Usha Sridhar, "A Flow-Based Node dominance centrality measure for Complex Networks," SN Computer Science, vol.3, no.5, September 2022, article no. 379. doi: https://doi.org/10.1007/s42979-022-01270-2.

Arun Kumar Kalakanti and Shrisha Rao, "A Hybrid Cooperative method with Lévy Flights for Electric Vehicle Charge Scheduling," IEEE Transactions on Intelligent Transportation Systems, vol. 23, no. 9, pp. 14306-14321, September 2022.

doi: https://doi.org/10.1109/TITS.2021.3127352.

Arti D. Yardi, "Third-party cyclic code reconstruction over binary erasure channel," International Journal of Information and Coding Theory, vol. 6, no. 1, 21p., September 2022.

doi: https://doi.org/10.1504/IJICOT.2022.125805.

Sagnik Bhattacharyya, Pankaj Kumar, Sam Darshi, Satyam Agarwal and Samar Shailendra, "Cross Layer MAC Protocol for a Peer Conscious Opportunistic Network Coded Cooperation System," IEEE Transactions on Mobile Computing, Early Access, September 16, 2022.

doi: https://doi.org/10.1109/TMC.2022.3207332.

Jayati Deshmukh and Srinath Srinivasa, "Computational Transcendence: Responsibility and agency," Frontiers in Robotics and Al, vol. 9, September 26, 2022.

doi: https://doi.org/10.3389/frobt.2022.977303.

Pradeesha Ashok, Rathin Bhargava, Naman Gupta, Mohammad Khalid and Dolly Yadav, "Structural parameterization for minimum conflict-free colouring," Discrete Applied Mathematics, vol. 319, pp. 239-253, October 15, 2022.

doi: https://doi.org/10.1016/j.dam.2021.12.026.

Shagufta Gupta, Poulomi Ghosh and V. Sridhar, "Impact of data trade restrictions on IT Services export: A cross-country analysis," Telecommunications Policy, vol. 46, no. 9, October 2022, 102403. doi: https://doi.org/10.1016/j.telpol.2022.102403.

Asoke K. Talukder, Lynn Schrim, Arnab Ghosh, Rakesh Biswas, Prantar Chakrabarti and Roland E. Haas, "Diseasomics: Actionable machine interpretable disease knowledge at the point-of-care," PLOS Digital Health, Online October 20, 2022.

doi: https://doi.org/10.1371/journal.pdig.0000128.

Parthiban Annamalai, Jyotsna Bapat and Debabrata Das, "UE Grouping Algorithms to maximize frequency sharing in Hybrid IBFD Networks," IEEE Transactions on Wireless Communications, vol. 21, no. 11, p. 9668 -9683, November 2022.

doi: https://doi.org/10.1109/TWC.2022.3178517.

Nanda Kishore Sreenivas and Shrisha Rao, "Safe Deployment of a Reinforcement Learning Robot using Self Stabilization," Intelligent Systems with Applications, vol. 16, November 2022, Article no. 200105.

doi: https://doi.org/10.1016/j.iswa.2022.200105.

Siri Chandana Daggubati, Jaya Sreevalsan-Nair and Komal Dadich, "BarChartAnalyzer: Data Extraction and Summarization of Bar Charts from Images," SN Computer Science, vol. 3, no. 6, November 2022, Article no. 500.

doi: https://doi.org/10.1007/s42979-022-01380-x.

Bidisha Chaudhuri, Meenakshi D'Souza and Janaki Srinivasan, "Bringing the missing women back: CS Education for women in India's engineering institutions," Communications of the ACM, vol. 65, no. 11, pp. 65-67, November 2022.

doi: https://doi.org/10.1145/3550490.

Justin Petelka, Elisa Oreglia, Megan Finn and Janaki Srinivasan, "Generating practices: Investigations into the double embedding of GDPR and data access policies," Proceedings of the ACM on Human-Computer Interaction, vol.6, no. CSCW2, 26p., November 2022, Article no. 518.

doi: https://doi.org/10.1145/3555631.

Tanujit Chakraborty, Swarup Chattopadhyay, Suchismita Das, Uttam Kumar and J. Senthilnath, "Searching for heavy-tailed probability distributions for modeling real-world complex networks," IEEE Access, vol.10, pp. 115092 - 115107 November 2022. doi: https://doi.org/10.1109/ACCESS.2022.3218631.

Manpreet Kaur Jaswal and Subir Kumar Roy, "DynPath - Non-Intrusive Feature-rich Hardwarebased execution path profiler," IEEE Access, vol. 10, pp. 116069 - 116086, November 2022.

doi: https://doi.org/10.1109/ACCESS.2022.3218710.

Eshita Sharma, Keshav Gupta, Lubaina Machinewala, Samaksh Dhingra, Shrey Tripathi, V S Shreyas and Sujit Kumar Chakrabarti, "Automated application processing," Sadhana, vol.47, November 2022, Article No. 244.

doi: https://doi.org/10.1007/s12046-022-02022-x.

Prem Singh, Shashank Tiwari and Rohit Budhiraja, "Low-Complexity LMMSE Receiver design for Practical-Pulse-shaped MIMO-OTFS Systems," IEEE Transactions on Communications, vol. 70, no. 12, pp. 8383 - 8399, December 2022.

doi: https://doi.org/10.1109/TCOMM.2022.3218627.

Yashwanth Ramamurthi, Tripti Agarwal and Amit Chattopadhyay, "A Topological similarity measure between Multi-Resolution Reeb Spaces," IEEE Transactions on Visualization and Computer Graphics, vol. 28, no. 12, pp. 4360 - 4374, December 2022.

doi: https://doi.org/10.1109/TVCG.2021.3087273.

N.P. Sharvari, Dibakar Das, Jyotsna Bapat and Debabrata Das, "Connectivity and Collision constrained opportunistic routing for emergency communication using UAV," Computer Networks, vol. 220, January 2023, Article no. 109468.

doi: https://doi.org/10.1016/j.comnet.2022.109468.

Tushar Vrind, Chandan Kumar, Lalit Pathak and Debabrata Das, "Feedback-based algorithm for Aerial cell's trajectory using Deep Learning for efficient performance in 6G," Computer Networks, vol. 220, January 2023, Article no. 109499. doi: https://doi.org/10.1016/j.comnet.2022.109499.

Anju Alexander, Annapurna Valiveti and Srinivas Vivek, "A Faster Third-Order Masking of Lookup Tables," IACR Transactions on Cryptographic Hardware and Embedded Systems, vol. 2023, no. 1, 538–556. doi: https://doi.org/10.46586/tches.v2023.i1.538-556.

Chaitali Diwan, Srinath Srinivasa, Gandharv Suri, Saksham Agarwal and Prasad, "Al-based learning content generation and learning pathway augmentation to increase learner engagement," Computers and Education: Artificial Intelligence, vol. 4, 2023, Article No. 100110. doi: https://doi.org/10.1016/j.caeai.2022.100110.

Sunil Kumar Vengalil, Bharath Krishnamurthy and Neelam Sinha, "Simultaneous segmentation of multiple structures in fundal images using multitasking Deep Neural Networks," Frontiers in Signal Processing, vol. 2, 13p., January 2023, Article No. 936875.

doi: https://doi.org/10.3389/frsip.2022.936875.

Balachandra Kumaraswamy and P G Poonacha, "An improved sub-harmonic to harmonic ratio method for pitch estimation and Shadja detection," Concurrency and Computation Practice and Experience, Online January 12, 2023, Article No. e7604. doi: https://doi.org/10.1002/cpe.7604.

Prashanth H C, Madhav Raa, Dhanya Eledath and Ramasubramanian V, "Trainable windows for SincNet architecture," EURASIP Journal on Audio, Speech and Music Processing, vol. 2023, 9p., January 2023, Article No. 3.

doi: https://doi.org/10.1186/s13636-023-00271-0.

Madhurima Panja, Tanujit Chakraborty, Sk Shahid Nadim, Indrajit Ghosh, Uttam Kumar and Nan Liu, "An ensemble Neural Network approach to forecast Dengue outbreak based on climatic condition," Chaos, Solitons & Fractals, vol. 167, February 2023, Article no. 113124.

doi: https://doi.org/10.1016/j.chaos.2023.113124.

Harshita Ravindra and Jaya Sreevalsan-Nair, "A methodology for Integrating Population Health Surveys using Spatial Statistics and Visualizations for Cross-Sectional analysis," SN Computer Science, vol. 4, no. 224, Online February 21, 2023. doi: https://doi.org/10.1007/s42979-022-01652-6. Ascar Davix X, D. Judson and G. R. Sinha, "License plate localization using Kernel search Multiwavelet decomposition," Multimedia Tools and Applications, vol.82, pp. 28957–28976, 2023.

doi: https://doi.org/10.1007/s11042-023-14570-3.

Annapurna Sharma, Rohit Katlaa, Gurleen Kaur and Dinesh Babu Jayagopi, "Full-page Handwriting recognition and automated essay scoring for inthe-wild essays," Multimedia Tools and Applications, Online March 13, 2023.

doi: https://doi.org/10.1007/s11042-023-14558-z.

Ashish Choudhury and Arpita Patra, "On the Communication Efficiency of Statistically Secure Asynchronous MPC with Optimal Resilience," Journal of Cryptology, vol. 36, Article No. 13, Online March 25, 2023.

doi: https://doi.org/10.1007/s00145-023-09451-9.

Pon Deepika, Kalahasti V V Deepesh, Phani Sriram Vadali, Madhav Rao, Vikas Vazhayil and Alok Mohan Uppar, "Computer Assisted Objective Assessment of Micro-Neurosurgical Skills from Intraoperative Videos," IEEE Open Journal of Engineering in Medicine and Biology, vol. 4, pp. 11-20, 2023. doi: https://doi.org/10.1109/OJEMB.2023.3257987.

Neeta Jha, Amrita Mishra, Jyotsna Bapat and Debabrata Das, "A Two-Stage Fast Beam search for Multi-user Millimeter-wave Massive MIMO Systems," IEEE Wireless Communications Letters, vol. 12, no. 5, pp. 879-882, May 2023.

doi: https://doi.org/10.1109/LWC.2023.3247484.

Emmanuelle P. Kleinlogel, Laetitia A. Renier, Marianne Schmid Mast, Dinesh Babu Jayagopi and Kumar Shubham, "From low invasiveness to high control: how Artificial Intelligence allows to generate a large pool of standardized Corpora at a lesser cost," Frontiers in Computer Science, vol.5, May 2023, Article no. 1069352.

doi: https://doi.org/10.3389/fcomp.2023.1069352.

Emmanuelle P. Kleinlogel, Marianne Schmid Mast, Dinesh Babu Jayagopi, Kumar Shubham and Anaïs Butera, ""The interviewer is a machine!" Investigating the effects of conventional and technology Imediated interview methods on interviewee reactions and behavior," International Journal of Selection and Assessment, Online May 09, 2023.

doi: https://doi.org/10.1111/ijsa.12433.

Rajesh Dinesh Hanbal. Amit Prakash and Janaki Srinivasan, "Seeing Data like a State: A case of Open Government Data in India's livelihoods program," Information Polity, vol. 28, no. 2, pp. 259-275, May 2023.

doi: https://doi.org/10.3233/IP-220060.

Ishu Gupta, Deepika Saxena, Ashutosh Kumar Singh and Chung-Nan Lee, "SeCoM: An Outsourced Cloudbased Secure Communication Model for Advanced Privacy Preserving Data Computing and Protection," IEEE Systems Journal, Early Access, May 2023. doi: https://doi.org/10.1109/JSYST.2023.3272611.

Syed Eqbal Alam, Dhirendra Shukla and Shrisha Rao, "A Communication-Efficient Local differentially Private Algorithm in Federated Optimization," IEEE Access, vol. 11, pp. 58254 - 58268, June 2023. doi: https://doi.org/10.1109/ACCESS.2023.3283503.

Ananya Appan, Anirudh Chandramouli and Ashish Choudhury, "Revisiting the Efficiency of Asynchronous MPC with Optimal Resilience against General Adversaries," Journal of Cryptology, vol. 36, no. 3, July 2023, Article no. 11.

doi: https://doi.org/10.1007/s00145-023-09457-3.

Arun Kumar Kalakanti and Shrisha Rao, "Computational Challenges and Approaches for Electric Vehicles," ACM Computing Surveys, vol. 55, no. 14s, July 2023, 35p.

doi: https://doi.org/10.1145/3582076.

Apurva Kulkarni, Chandrashekar Ramanathan, and Vinu E. Venugopal, "Semantics-aware Document Retrieval for Government Administrative Data," International Journal of Semantic Computing, Early Access, July 2023.

doi: https://doi.org/10.1142/s1793351x23300017.

Deepika Saxena, Ishu Gupta, Rishabh Gupta, Ashutosh Kumar Singh and Xiaoqing Wen, "An Al-Driven VM Threat Prediction Model for Multi-Risks Analysis-Based Cloud Cybersecurity," IEEE Transactions on Systems, Man, and Cybernetics: Systems, Early Access, July 2023.

doi: https://doi.org/10.1109/TSMC.2023.3288081.

Shubham Aggarwal, Nithya Ganesan and B. Thangaraju, "Integrating Network Function Virtualization with the DevOps Pipeline: Distributed Systems," Open Source For You, vol. 11, no. 03, pp. 93-98, January 2023.

url: https://www.opensourceforu.com/2023/02/ integrating-network-function-virtualization-with-thedevops-pipeline-distributed-systems/.

Shubham Aggarwal, Nithya Ganesan, and B. Thangaraju, "Integrating Network Function Virtualization with the DevOps Pipeline: Containerization," Open Source For You, vol. 11, no. 04, pp. 95-98, February 2023.

url: https://www.opensourceforu.com/2023/03/ integrating-network-function-virtualization-with-thedevops-pipeline-containerization/. Udith Sai M. and Dr B. Thangaraju, "Dynamic Application Security Testing Using Acunetix and GuardRails," Open Source For You, vol. 11, no. 05, pp. 42-28, March 2023.

url: https://www.opensourceforu.com/2023/04/ dynamic-application-security-testing-usingacunetix-and-guardrails/.

Shubham Aggarwal, Nithya Ganesan, and B. Thangaraju, "Integrating Network Function Virtualization with the DevOps Pipeline: Kubernetes," Open Source For You, vol. 11, no. 05, pp. 90-95, March 2023.

url: https://www.opensourceforu.com/2023/04/ integrating-network-function-virtualization-with-thedevops-pipeline-kubernetes/.

Sai Rithwik M. and Dr B. Thangaraju, "cgroups: The Key to Effective Resource Management in Linux Systems," Open Source For You, vol. 11, no. 06, pp. 86-91, April 2023.

url: https://www.opensourceforu.com/2023/05/ cgroups-the-key-to-effective-resourcemanagement-in-linux-systems/.

Shubham Aggarwal, Nithya Ganesan, and B. Thangaraju, "Integrating Network Function Virtualization with the DevOps Pipeline: Cloud Computing," Open Source For You, vol. 11, no. 06, pp. 92-95, April 2023.

url: https://www.opensourceforu.com/2023/05/ integrating-network-function-virtualization-with-thedevops-pipeline-cloud-computing/. Shubham Aggarwal, Nithya Ganesan, and B. Thangaraju, "Integration of Network Function Virtualization with the DevOps Pipeline: Software Defined Networks," Open Source For You, vol, 11, no. 07, pp. 84-87, May 2023.

url: https://www.opensourceforu.com/2023/06/ integration-of-network-function-virtualization-withthe-devops-pipeline-software-defined-networks/.

Debabrata Das, "Top Campanies need highly skilled manpower and that needs to be increased in India," Electronics For You, vol. 55, no. 6, pp. 30-34, June 2023.

url: https://www.electronicsforu.com/technologytrends/top-companies-need-highly-skilledmanpower

Suchi and B. Thangaraju, "Ansible AWX: The GUI Configuration Management Automation Tool You Will Love to Use," Open Source For You, vol, 11, no. 08, pp. 79-87, June 2023. url: https://www.opensourceforu.com/2023/07/ ansible-awx-the-gui-configuration-managementautomation-tool-you-will-love-to-use/.

Shubham Aggarwal, Nithya Ganesan, and B. Thangaraju, "The Role of Network Function Virtualization in Telecom Infrastructure," Open Source For You, vol, 11, no. 08, pp. 90-92, June 2023. url: https://www.opensourceforu.com/2023/07/therole-of-network-function-virtualization-in-telecominfrastructure/.

Shubham Aggarwal, Nithya Ganesan, and B. Thangaraju, "Integration of Network Function Virtualization with the DevOps Pipeline: DevOps Methodology," Open Source For You, vol, 11, no. 09, pp. 62-85, July 2023.

Satya Jyoti Das, Astha Borkataky, Nithya Ganesan and Dr B. Thangaraju, "Simplifying OpenStack Deployment with Tacker," Open Source For You, vol, 11, no. 09, pp. 91-94;98, July 2023.

# PATENTS PUBLISHED/GRANTED

Tushar Vrind, Lalit Kumar Pathak, B Sudharshan Rao and Debabrata Das, "Methods and Systems for Sharing Aerial Assets Amongst Terrestrial Network Operators," published as European Patent Publication No. EP 4035283 A1 on August 03, 2022.

Lalith Kumar, Kundan Tiwari, Debabrata Das anf and Anikethan Ramakrishna Vijaya Kumar, "Method and Apparatus for Downlink Uplink Collision Handling in Wireless Communication Network," published as European Patent Publication No. EP 4000319 A4 on September 7, 2022. Lalith Kumar, Kundan Tiwari, Debabrata Das and and Anikethan Ramakrishna Vijaya Kumar, "Method and Apparatus for Downlink Uplink Collision Handling in Wireless Communication Network," published as US Patent No. US 2022/0295440 A1 on September 15, 2022.

Tushar Vrind, Lalit Kumar Pathak, Samir Kumar Mishra and Debabrata Das, "A Method and System for Replacement of Energy and Capacity-Constrained 6g Aerial Cells," published as WIPO Patent No. WO 2022/211516 A1 on October 6, 2022. Tushar Vrind, Lalit Kumar Pathak, Samir Kumar Mishra and Debabrata Das, "A method and system for replacement of energy and capacity-constrained 6g aerial cells," published as Indian Patent Publication No. 40/2022 on October 07, 2022.

Ramkumar Thirumalli Sureshsah, Mohanraja Balasubramaniam and Debabrata Das, "Methods and Systems for Providing Communication between a Multi-Sim User Equipment and Networks," published as WIPO Patent No. WO/2022/216110 A1 on October 13, 2022.

Ramkumar Thirumalli Sureshah, Mohanraja Balasubramaniam and Debabrata Das, "Methods And Systems For Providing Communication Between A Multi-Sim User Equipment And Networks," published as Indian Patent Publication No. 41/22 on October 14, 2022.

Tushar Vrind, Lalit Kumar Pathak, Sudarshan Rao B and Debabrata Das, "Methods and Systems for Sharing Aerial Assets Amongst Terrestrial Network Operators," published as US Patent Publication No. 2022/0345203 A1 on October 27, 2022.

G N Srinivasa Prasanna, "Ganaka-2: A Computer and Architecture Operating on Models, Contd," published as US Patent No. US20220391723 A1 on December 08, 2022. Lalith Kumar, Anikethan Ramakrishna Vijaya Kumar, Kundan Tiwari and Debabrata Das, ´ System and method for downlink uplink collision handling," published as Indian Patent Publication No. 49/22 on December 09, 2022.

Tushar Vrind, Lalit Kumar Pathak, Sudharshan Rao B and Debabrata Das, "Methods and systems for deploying and sharing of aerial cells in a mMTC system,"published as Indian Patent Publication No. 14/2023 on April 07, 2023.

Dibakar Das, Jyotsna Bapat, Vikram Seshasai, Vineet Sudhir Bhat, Pushkal Juneja and Debabrata Das, "Multi-class classifier with artificial and anonymous training for data privacy," published as Indian Patent Publication No. 15/2023 on April 14, 2023.

Saptarshi Chaudhuri, Irfan Baig, Prashant Mishra and Debabrata Das. "A System and a Method for User Scheduling in a Wireless Broadband Network," Indian Patent Number: 409280, October 19, 2022.

Kavin Kumar Thangadorai, Vimal Bastin Edwin Joseph, Kumar Murugesan and Debabrata Das, "Unified Signaling Beacon for Traditional and Mesh Wi-Fi Network," Indian Patent Number: 410659, November 01, 2022.

# **BOOK CHAPTERS**



Kapil Kalra, K. N. Nikhila and Sujit Kumar Chakrabarti, "Physics Simulation Based Approach to Node Clustering," in Engineering Mathematics and Computing, Park Gyei-Kark et.al., Eds., Singapore: Springer, 2022, Chapter 15, pp. 213-234. doi: https://doi.org/10.1007/978-981-19-2300-5 15

Prem Singh and Ekant Sharma, "FBMC: A Waveform Candidate for Beyond 5G," in A Glimpse Beyond 5G in Wireless Networks, Mohammad Abdul Matinm Ed., Switzerland; Springer, 2022, Chapter 3, pp. 89-118. doi: https://doi.org/10.1007/978-3-031-13786-0\_3

Ekant Sharma and Prem Singh, "Full-Duplex Multi-Hop Communication for Beyond 5G," in A Glimpse Beyond 5G in Wireless Networks, Mohammad Abdul Matin, Ed., Switzerland; Springer, 2022, Chapter 4, pp. 119-141.

doi: https://doi.org/10.1007/978-3-031-13786-0\_4

Sapna Singh Kshatri, Deepak Singh, Tilottama Goswami and G.R.Sinha, "Introduction to statistical modeling in machine learning: A case study," in Statistical Modeling in Machine Learning: Concepts and Applications, Tilottama Goswami and G.R. Sinha, Eds., UK: Academic Press, 2023, Chapter 1, pp. 1-21. doi: https://doi.org/10.1016/B978-0-323-91776-6.00007-5

Satendra Singh and Jaya Sreevalsan-Nair, "Visual Exploration of Lidar Point Clouds," in Advances in Scalable and Intelligent Geospatial Analytics Challenges and Applications, Surya S Durbha et.al., Eds. CRC Press, 2023, Chapter 12, pp.223-241. doi: https://doi.org/10.1201/9781003270928-16 Smith K Khare, Asif Manzoor Khan, Varun Bajaj and G R Sinha, "Introduction to smart healthcare and the role of cognitive sensors," in Cognitive Sensors, Volume 2: Applications in smart healthcare, Tilottama Goswami and G.R.Sinha, Eds., UK: IOP Publishing, April 2023, Chapter 1, pp. 1-21.

doi: https://iopscience.iop.org/book/edit/978-0-7503-5346-5/chapter/bk978-0-7503-5346-5ch1

Swapnil Shrivatsava and T K Srikanth, "A Comprehensive Consent Management System for Electronic Health Records in the Healthcare Ecosystem," in Information Security and Privacy in Smart Devices: Tools, Methods, and Applications, Carlos Rabadão, Leonel Santos and Rogério Luís de Carvalho Costa, Eds., USA, IGI Global, April 2023, Chapter 7, pp.194-233.

doi: https://doi.org/10.4018/978-1-6684-5991-1.ch007

G. R. Sinha, "Environmental Sensors," in Encyclopedia of Sensors and Biosensors. vol.3, Roger Narayan and Mehmet R. Yuce, Eds., Amsterdam: Elsevier, 2023. pp. 332-344.

doi: https://doi.org/10.1016/B978-0-12-822548-6.00129-1

Preeti Mudliar, "Harvesting Foreign Fields, the Researcher as a Solitary Reaper Away from Home," in Transformative Learning: Autoethnographies of Qualitative Research, Frode Soelberg et.al., Eds., Switzerland: Palgrave Macmillan, 2023, Chapter 6, pp. 83-96.

doi: https://doi.org/10.1007/978-3-031-20439-5\_6

Alessio Bertolini, Mark Graham, Mounika Neerukonda, Sanna Ojanperä, Balaji Parthasarathy, Janaki Srinivasan, Pradyumna Taduri and Funda Ustek-Spilda, "Platformizing Informality, One Gig at a Time," in Platformization and Informality: Pathways of Change, Alteration, and Transformation, Aditi Surie and Ursula Huws, Eds., Switzerland: Palgrave Macmillan, 2023, Chapter 2, pp. 13-45. doi: https://doi.org/10.1007/978-3-031-11462-5\_2

Rahul Dev, Krishanu Kundu, Astha Sharma and Shiv Narain Gupta, "Application of Machine Learning in Finger Vein Pattern Recognition," in Paradigms of Smart and Intelligent Communication, 5G and Beyond, Amrita Rai, Dinesh Kumar Singh, Amit Sehgal and Korhan Cengiz, Eds., Singapore; Springer, 2023, Chapter 7, pp. 117-128.

doi: https://doi.org/10.1007/978-981-99-0109-8\_7

Madhurima Panja and Uttam Kumar, "Computer-Aided or Computer-Assisted Instruction," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 165-169. doi: https://doi.org/10.1007/978-3-030-85040-1\_63

Deeksha Aggarwal and Uttam Kumar, "Constrained Optimization," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 175-179.

doi: https://doi.org/10.1007/978-3-030-85040-1\_66

Indu Solomon and Uttam Kumar, "Convex Analysis," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 180-183.

doi: https://doi.org/10.1007/978-3-030-85040-1\_67

Madhurima Panja, Tanujit Chakraborty and Uttam Kumar, "Data Dictionary," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 230-234.

doi: https://doi.org/10.1007/978-3-030-85040-1\_75

Jaya Sreevalsan-Nair, "Data Visualization," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 241-246.

doi: https://doi.org/10.1007/978-3-030-85040-1\_78

Jaya Sreevalsan-Nair, "Eigenvalues and Eigenvectors," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 336-339.

doi: https://doi.org/10.1007/978-3-030-26050-7\_98-1

Jaya Sreevalsan-Nair, "Expectation-Maximization Algorithm," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 355-358.

doi: https://doi.org/10.1007/978-3-030-26050-7\_103-1

Indu Solomon and Uttam Kumar, "Fast Wavelet Transform," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 376-380.

doi: https://doi.org/10.1007/978-3-030-85040-1\_113

Jaya Sreevalsan-Nair, "Fuzzy C-Means Clustering," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 447-449.

doi: https://doi.org/10.1007/978-3-030-85040-1\_129

Rahisha Thottolil and Uttam Kumar, "Graph Mathematical Morphology," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 594-599.

doi: https://doi.org/10.1007/978-3-030-85040-1\_149

Jaya Sreevalsan-Nair, "Independent Component Analysis," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 642-644.

doi: https://doi.org/10.1007/978-3-030-85040-1\_158

Jaya Sreevalsan-Nair, "Interpolation," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 660-664.

doi: https://doi.org/10.1007/978-3-030-85040-1\_164

Jaya Sreevalsan-Nair, "K-Means Clustering," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 695-697.

doi: https://doi.org/10.1007/978-3-030-85040-1\_171

Jaya Sreevalsan-Nair, "K-Medoids," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 697-700.

doi: https://doi.org/10.1007/978-3-030-85040-1\_172

Jaya Sreevalsan-Nair, "K-nearest Neighbors," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 700-702.

doi: https://doi.org/10.1007/978-3-030-85040-1\_170

Jaya Sreevalsan-Nair, "Laplace Transform," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 715-717.

doi: https://doi.org/10.1007/978-3-030-85040-1\_175

Jaya Sreevalsan-Nair, "LiDAR," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 735-738.

doi: https://doi.org/10.1007/978-3-030-85040-1\_180

Balakrishnan Ashok, "Logistic Attractors," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 751-756.

doi: https://doi.org/10.1007/978-3-030-85040-1\_185

Tanujit Chakraborty and Uttam Kumar, "Loss Function," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 774-779.

doi: https://doi.org/10.1007/978-3-030-85040-1\_187

Deeksha Aggarwal and Uttam Kumar, "Matrix Algebra," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 836-842.

doi: https://doi.org/10.1007/978-3-030-85040-1\_442

Jaya Sreevalsan-Nair, "Maximum Likelihood," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 851-853.

doi: https://doi.org/10.1007/978-3-030-85040-1\_198

Jaya Sreevalsan-Nair, "Minimum Entropy Deconvolution," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 868-870.

doi: https://doi.org/10.1007/978-3-030-85040-1\_206

Jaya Sreevalsan-Nair, "Multiscaling," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 970-974.

doi: https://doi.org/10.1007/978-3-030-85040-1\_223

Jaya Sreevalsan-Nair, "Normal Distribution," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 999-1002.

doi: https://doi.org/10.1007/978-3-030-85040-1\_228

Uttam Kumar, "Pattern," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 1053-1057.

doi: https://doi.org/10.1007/978-3-030-85040-1\_245

Jaya Sreevalsan-Nair, "Proximity Regression," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 1116-1117.

doi: https://doi.org/10.1007/978-3-030-85040-1\_258

Anindita Dasgupta and Uttam Kumar, "Sampling Importance: Resampling Algorithms," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 1239-1244.

doi: https://doi.org/10.1007/978-3-030-85040-1\_281

Jaya Sreevalsan-Nair, "Simulated Annealing," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 1320-1322.

doi: https://doi.org/10.1007/978-3-030-85040-1\_291

Jaya Sreevalsan-Nair, "Virtual Globe," in Encyclopedia of Mathematical Geosciences (Encyclopedia of Earth Sciences Series), B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg Eds., Switzerland: Springer, 2023, pp. 1619-1623. doi: https://doi.org/10.1007/978-3-030-85040-1\_346

**BOOKS AUTHORED** 



Janaki Srinivasan, The Political Lives of Information: Information and the Production of Development in India (Information Society Series). Cambridge, USA: MIT Press, 2022.

url: https://direct.mit.edu/books/book-pdf/2086606/ book\_9780262370363.pdf Ashish Choudhury and Arpita Patra, Secure Multi-Party Computation against Passive Adversaries. Switzerland: Springer, 2022. doi: https://doi.org/10.1007/978-3-031-12164-7

# **EDITED BOOKS**

Tilottama Goswami and G.R.Sinha. Eds., Statistical Modeling in Machine Learning: Concepts and Applications. London; UK, Academic Press, 2023. doi: https://doi.org/10.1016/C2021-0-01370-5

G. R. Sinha and Varun Bajaj, Eds., Cognitive Sensors, Volume 1: Intelligent sensing, sensor data analysis and applications. London; UK, IOP Publishing. 2022. doi: https://dx.doi.org/10.1088/978-0-7503-5326-7 G. R. Sinha and Varun Bajaj, Eds., Cognitive Sensors, Volume 2: Applications in smart healthcare. London; UK, IOP Publishing. 2023.

doi: https://dx.doi.org/10.1088/978-0-7503-5346-5







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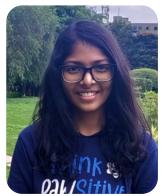
# **STUDENT ACTIVITIES**





# **STUDENT AFFAIRS COUNCIL**





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### August 16, 2022

### Shree Krishna Janmashtami Celebration

Turiya Club of IIIT-Bangalore had organized a musical event which commenced with a quiz centered around the life of Shree Krishna, correct responses were rewarded with gifts, Furthermore, this musical evening encompassed an enlightening session on the "Significance of Krishna's Teachings" extracted from The Bhagavad Gita. This was succeeded by a soothing mantra meditation to ease the mind. Participants experienced a heightened spiritual state amid the melodious chants of Shree Radha Krishna playing in the backdrop. Notably, over 50 students from diverse courses at IIIT-B participated in synchronized chanting.

### August 20, 2022

# Students Donated 100 kg of Clothes in Collection Drive

Aikyam, the social service division of the Students Club, gathered used garments from fellow students laundered and air-dried the items, and arranged them into 15 bags, totaling approximately 100 kilograms in weight. With a purposeful intent, the group then made a visit to the Goonj organization situated on Hosa Road, where they donated all the bags of clothing. This gesture was undertaken with the understanding that these donations would have a positive impact on both orphans and elderly individuals in need.

# September 5, 2022 Blood Donation Camp

Aikyam, the social volunteering club of IIIT-Bangalore in collaboration with Bangalore Medical Services Trust (BMST) organized a Blood Donation Camp at the campus. A team of doctors, nurses and technicians coordinated in collecting blood from the enthusiastic donors after checking their health condition. Regular blood donation by healthy people not only ensures availability of the blood to the needy during the hour of need, but also helps the donors in maintaining their health. BMST distributed refreshments and certificate of appreciation to all the donors.





# October 1, 2022

### **Garba Night**

Students danced to the tunes of Garba! In Garba dance, performers circle around the image of Goddess Durga as a symbolic representation of her creative energy. At IIIT-Bangalore, the students performed to showcase the immense creative potential they possess. They were all dressed in traditional Garba ensembles.



### October 23, 2022

# 15 Student Volunteers Illuminate Mathrushri Old Age Home with Joy and Generosity

About 15 dedicated student volunteers from Aikyam paid a visit to the Mathrushri Old Age Home, aiming to infuse the Diwali festivities with warmth. They illuminated the surroundings with the diyas and filled the air with singing with the elderly residents. The volunteers also extended their generosity by presenting essential groceries to the old age home.

# March 24, 2023 Blood Donation Drive

Aikyam, the social volunteering club of our institute in association with NSS, IIIT-B and Bangalore Medical Services Trust (BMST) organized a Blood Donation Camp. A total of 91 donors came forward for the cause. The camp, set up by Bangalore Medical Services Trust (BMST), a not-for-profit organization working in the field of blood banking and transfusion organized with the aim to encourage the youth to donate blood, and to spread awareness. The team distributed Blood Donor Cards, Information material and certificate of appreciation to all the donors and healthy refreshments were arranged for the donors.



### April 22, 2023

**Earth Day-Plantation Drive in front of Lilavati block** In observance of Earth Day, the SAC Members collaborated with students to orchestrate a tree plantation initiative aimed at fostering a more ecologically sustainable planet. The tree planting activity took place adjacent to the Lilavati block and encompassed the planting of Tuberose, Hibiscus, Bel Patra, and Jackfruit trees. Simultaneously, a comprehensive campus cleanup campaign was undertaken to maintain the pristine and verdant ambiance of our campus.

# **STUDENT ACHIEVEMENTS**



# August

Two teams from 2018 and 2019 iMTech batches, Adrij Sharma, Agrim Jain, Akshat Garg and Shrey Tripathi won the grand finale of the Smart India Hackathon 2022 (Problem Statement GR821 – Bias correction in N.W.P. temperature forecasting model.

### **Best Paper Award**

Ph.D. Scholar Anindita Dasgupta and Prof. Uttam Kumar received the 'Best Paper Award' at the Virtual Symposium on Applications of Machine Learning and Data Science in inter-disciplinary areas' at the India Institute of Management, Visakhapatnam. The paper title was 'Impact of Increased Urbanization on Land Surface Temperature: A Case Study of Bangalore'.

### October

Abidha V P, PhD student obtained a postdoctoral position at Hong Kong University of Science and Technology (HKUST). Prof. M Golin and Prof. Amir Goharshady jointly offered the postdoc position in the work, 'The application of parameterized complexity to the field of formal verification'.

Nikhila KN, PhD student obtained a Research Associate role for a joint project between the National University of Singapore (NUS) and CNRS France along with other organizations in Singapore and France for the project, WP1- Descartes: Intelligent Modeling for Decision-making in Critical Urban Systems.

# November

'Walk of Life' Developed by IIIT-B Students Wins Second Place in DP World Hackathon.



Kamikazee was announced as the runner-up in the Big Tech Project hackathon organized by Dubaibased DP World. The team, Kamikazee consisted fourth year iMTech students, Akshat Garg and Agrim Jain. 'Walk of Life' is a solution developed by them that leverages the metaverse to provide students with experience in various professions helping them make better career decisions wisely. was quite unique and out of the box. They won 3,000 USD, Macbooks and a few amazing goodies from DP World.

Beyond creating a VR experience to choose right career path that requires physical involvement such as pilot, scuba diving, shooting, swimming, astronaut and surgery, 'Walk of Life' can be used training and recreational purposes.

# December 27-30

Ketaki Tamhanakar Won 3<sup>rd</sup> Prize in Mood Indigo of IIT Bombay. Ketaki Tamhanakar, a second-year iMTech student of our institute won 3<sup>rd</sup> prize in Virtuoso (Solo instrumental competition) for her Tabla performance at Mood Indigo, popularly known as MoodI at IIT Bombay. Ms. Ketaki participated in the 52<sup>nd</sup> edition of MoodI which comprised of more than 240 events and spanned over four days from December 27-30.



# January 8-12

1st Year MTech Students Won VLSI Design Contest



IIIT-Bangalore's 1<sup>st</sup> year M. Tech ECE students, Vinay Rayapati, Gopala Krishna Reddy Sanampudi, Ravi Kiran Reddy and Ajay Kumar with Prof. Nanditha Rao won the VLSI design contest at VLSI Design Conference 2023, Hyderabad. They bagged the first prize in the contest for implementing their proposal on "brain tumour segmentation" with the Microchip PolarFire SoC FPGA Kit.

### **January 20**

Parvaaz, Theatre Club of IIIT-B Won 2<sup>nd</sup> Place at Revelation 2023, SIBM.



14 students from the Theatre Arts Club (Parvaaz) from IIIT-Bangalore have won second prize at the annual cultural festival Revelation 2023 at Symbiosis Institute of Business Management (SIBM) on January 20. The students took part in the stage play event Tamashaa and performed the play "Andher Nagari Chaupat Raja".

# **January 22**

The Third Eye, Band of IIIT-B Bagged 2<sup>nd</sup> Place in Revelation 2023, SIBM.



The band from IIIT-B, 'The Third Eye' participated in the Battle of Bands competition, 'Euphony' as a part of Revelation 2023 at Symbiosis Institute of Business Management (SIBM) on January 22. The band bagged the second prize in a tough competition with 8 participating teams. The prize included a trophy and a cash prize of `. 12,000. The band played compositions that were a blend of Hindustani classical music and Metal music. This interesting fusion of genres certainly set the band apart in the competition.

# February

Rahisha Thottolil Won Best Paper Presentation Award Rahisha Thottolil, PhD Scholar, IIIT-Bangalore won the Best Paper Presentation Award under the theme "Spatial Informatics in Urban Planning" for her paper titled "Quantitative assessment of urban road network hierarchy, topology and walkable access using open-source GIS tools" in the Annual Conference on "Infrastructure and Built Environment: Towards Sustainable and Resilient Societies" (IBSR). Prof. Uttam Kumar was the co-author of this paper. The conference was held at Ranbir and Chitra Gupta School of Infrastructure Design and Management, Indian Institute of Technology Kharagpur from February 2-4.

# Nithya Ganesan, PhD Student received the Best Paper Presentation Award.

Nithya Ganesan, PhD Student received the Best Paper Presentation Award for her paper titled "Performance Evaluation of Virtual Network Service Function Deployment in Docker Containers" at the 12<sup>th</sup> International Conference on Industrial Technology and Management at University of Cambridge, Cambridge, United Kingdom on February 17, 2023. Prof. Thangaraju was the mentor for this paper. The paper is co-authored by iMTech students Hrithik Sharma, Sahaj Vaghasiya, Prajwal Agarwal, and Dev Patel.

IIIT-B Students Participates in Technology for Peace Kautuk Raj (IMT2019043) and Adrij Sharma (IMT2019004) participated in an International Youth Summit – Technology for Peace organized in Dumaguete, Philippines on February 18., as a part of a European Union project.

# Anindita Dasgupta Awarded Sahyadri Young Ecologist.

Anindita Dasgupta, Ph.D. Scholar, International Institute of Information Technology-Bangalore was awarded Sahyadri Young Ecologist and Second Prize for the research paper "Assessment of changes in LST during last two decades: Urban transformation" in Lake 2022, Conference on Conservation of Wetlands. Prof. Uttam Kumar was the co-author of this research paper. This Ecosystem-Based Adaptation of Climate Change conference was held at Centre for Ecological Sciences, Indian Institute of Science, Bangalore in December 2022.

### March

IIIT-B Students Won Yuru Musical Instrument Hackathon.



Yuru Musical Instrument Hackathon organised by Sony India and Sony Japan in which participants were expected to create prototypes of casual musical instruments that can be played by anyone without prior knowledge and training in music and to create Musical instruments using Sony's robotic toys toio (toy platform) TM and MESH TM as well as IoT board computer Spresense TM along with other 3<sup>rd</sup> party electronic components, modules, boards, sensors, actuators etc. The students from International Institute of Information Technology-Bangalore not only bagged first place with a cash prize of Rs. 50,000 but they had a gamifying experience.

# April

IIIT-B's Parvaaz Club Won at a Drama Prestigious Drama Competition.



Andher Nagri' drama by Parvaaz Club members won the first prize at Carnival Spotlight'23 a cultural fest of PES University on April 15. The cast and crew of the drama worked really hard at a given short time and persevered to achieve this accomplishment. Drama competitions can be challenging, requiring dedication, talent, and teamwork. It's a testament to their abilities and determination that they were able to overcome the obstacles and come out on top by giving a remarkable performance.

Parvaaz, theatre arts Club of IIIT-Bangalore won the first prize in a drama competition of Carnival Spotlight'23, a cultural fest of PES University. Overcoming tough competition from various colleges, the team of Parvaaz won the first prize with a cash prize of ₹5K.

IIIT-B's 'IMPULSE' Won 1st Prize at Sygnite '23



IIITB Annual Report 2022-23

The Dance Club of IIIT-B won the first prize in Da Pulse, the group dance competition at Sygnite '23, the cultural fest of Symbiosis Centre for Management Studies, Bengaluru (SCMS-B) held during April 19-20, 2023.

iMTech Students won First Prize at Rotary Club's Annual Debate.



Four of our iMTech students participated in the prestigious annual debate competition organised by the Rotary Club, Bangalore. Vishruth Vijay and Siddharth Menon won the first prize and Tahir Mohammed & Nikita Kiran finished with third prize. Tahir was declared the best speaker of the night. They won a prize money of Rs. 60,000.

Heet Vasani Secured 2<sup>nd</sup> Place and \$600 Prize in Global DComm VALHALLA Hackathon.



Heet Vasani emerges victorious in the DComm VALHALLA hackathon, securing the prestigious 2<sup>nd</sup> place and earning a well-deserved prize of \$600! This global hackathon witnessed the participation of over 250 teams consisting of 1 to 4 members each.

Remarkably, Heet achieved this remarkable feat as a solo participant, proving his exceptional skills and determination. The hackathon was conducted online mode on the Hack2Skill platform by a web3-based company, DComm in New Zealand.

Tarun Gupta Won Chainlink's Web3 Hackathon.



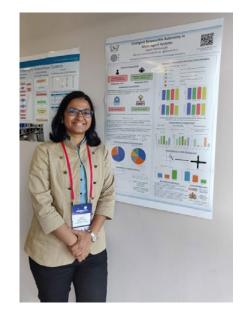
Tarun Gupta, an iMTech student as he won Web3 hackathon conducted by Chainlink (a Web3 company). Tarun along with his childhood friend, Bhavesh formed a team to participate in Chainlink Spring hackathon 2023 for the first time that was conducted in online mode from April 28 – June 11. As a team they won \$2500 for winning Web3 Hackathon.

Raghava S N at IEEE International Symposium with Innovative FPGA-Based 2D Convolution Project.



Raghava S N under the guidance of Prof. Nanditha Rao which he presented recently at the IEEE International Symposium on Field-Programmable Custom Computing Machines (FCCM) Demo Night, 2023 in Los Angeles. The event stands as a premier platform where groundbreaking research centered around computing that harnesses the unique capabilities of FPGAs and other reconfigurable hardware is presented and discussed. The Demo Night takes center stage, offering a casual environment for all conference attendees to mingle and exchange knowledge. This event serves as a platform for showcasing system designs, platforms, tools and more.

PhD Scholar Jayati Deshmukh at AAMAS 2023 with Dual Paper Presentations.



Jayati recently presented two papers at AAMAS 2023 in London, one at the main conference and another at the Doctoral Consortium. Additionally, she showcased her research at the Alan Turing Institute and City University. Furthermore, she engaged in a one-on-one discussion with Prof. Virginia Dignum from Umea University, Sweden, focusing on AI Ethics. Autonomous Agents and Multiagent Systems (AAMAS) is the largest and most influential conference in the area of agents and multiagent systems, bringing together researchers and practitioners in all areas of agent technology and providing an internationally renowned high-profile forum for publishing and finding out about the latest developments in the field.

# July 13-15

Students won First Prize in CISCO's Code-a-thon.



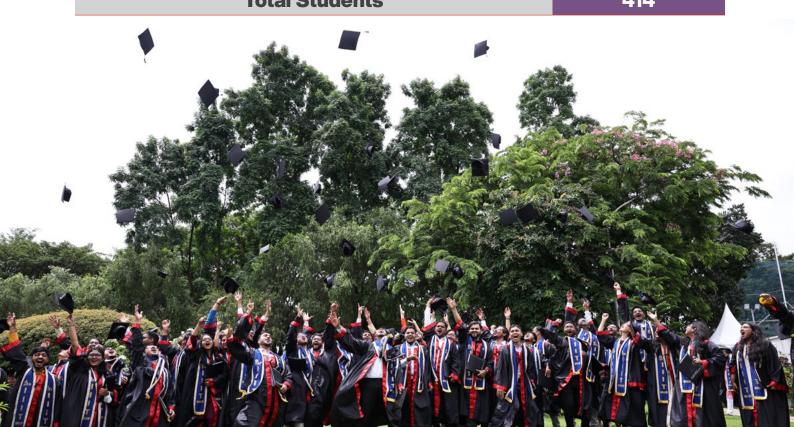
iMTech students Netradeepak Chinchwadkar, Dharmin Mehta, Satvik Verma have won first place in Fry the Phish track in Code-a-thon organised by CISCO. As a prize, each one of them received one Go pro hero11. Code-a-thon was conducted all over India with 20000+ teams in the 1<sup>st</sup> round, an Online Assessment test. A total of 24 teams were shortlisted for the offline hackathon which was on CISCO Bangalore campus.

# STUDENT ADMISSIONS (2022-23)

Following Table gives the glimpse of the students enrolled for academic programmes during the Academic Year 2022-23.

A total of 414 students joined the institute during July – August 2022.

Programme	Male	Female	Total
M.Tech	145	29	174
iMTECH	161	15	176
MSc (DT)	8	6	14
MS by Research	22	6	28
Ph.D	8	14	22
т		<b>414</b>	



# **PLACEMENT STATISTICS**

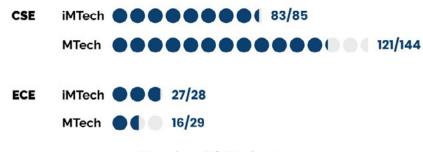




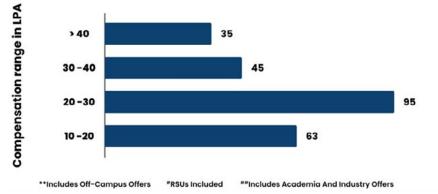
OFFER**	METRIC	iMTech		MTech	
		CSE	ECE	CSE	ECE
Full Time CTC <sup>#</sup> (INR In Lakhs)	Highest	65	65	65	38
	Average	35	29.6	24	26.2
	Median	27.3	23	20.7	22.5
Internship Stipend (INR In Thousands)	Highest	200	128	121.3	113
	Average	81	63.6	72.7	45.2
	Median	87.5	45	55	45

# Percentage Of Students - Full Time Employment (FTE)

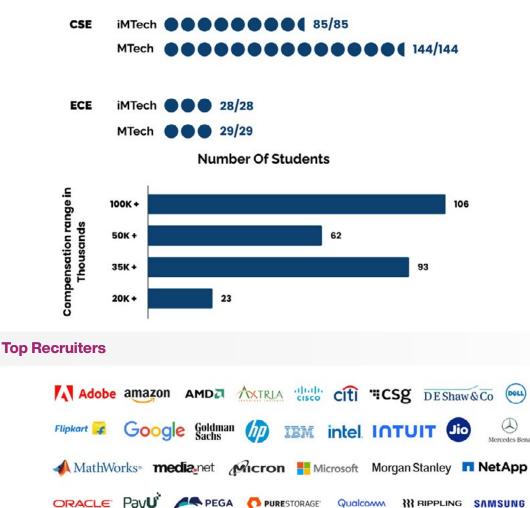
INR in Lakhs







# **Internship/Thesis**



SIEMENS SICE TESCO TEXAS INSTRUMENTS TO TRACEABLE.

# **Higher Studies / RA Offers Received**



# **FULL TIME RECRUITMENTS**

Company Name	Students	Microchip	1
	Recruited	Micron	7
Adobe	4	Microsoft	2
Airports Authority of India	1	Mobisy	2
Akamai	1	Morgan Stanley	8
Ampere Computing	2	MS University of Buffalo	1
Amuse Labs	1	Oracle	15
Axtria	5	Outdu	1
Botzee	2	Payu	5
CardlePoint	2	PlaySimple	1
Caterpillar	1	Pure Storage	3
Cisco	15	Qualcomm	19
Citi	3	Quest Global Private Limited	1
Cogoport	1	Rippling	3
Cropin	2	Samsung	14
CSG	4	SAP	3
D E Shaw	1	Schneider	1
Dataweave	1	Siemens	2
Dell	3	Slice	3
EXL	2	Synopsys	1
FactSpan	2	TCS	1
Flipkart	4	Tesco	5
Google	2	Texas Instruments	1
HSBC	1	Thoughtspot	3
IBM	16	Trilogy	1
llSc	1	Uber	4
Intuit	1	University of Twente	1
Jio	17	Urban Company	4
Mathworks	8	Walmart	4
MBRDI	5	WD	5
Media.net	4	Wells Fargo	14
Vediatek	1	Zorro Internet	1

# **INTERNSHIP RECRUITMENTS**

Company Name	Students Recruited
Akamai	1
Amazon	58
AMD	1
Analog Digital	1
Atlan	1
Axtria	1
Botzee	2
Cisco	12
Citi	2
Cogoport	1
CradlePoint	4
Cropin	1
CSG	2
CUAS, Villach, Austria	1
DEShaw	1
Dataweave	3
Dell	3
EHRC	1
Flipkart	5
Growwupp	1
Gyaanlakshmi	1
Hotstar	3
HP	3
HSBC	6
IBM	18
IIIT-B Innovation Center	1
llSc	1
Infosys	3
Intel	17
Intuit	1
IUDX, IISc	3
Jio	11
Mathworks	8
MBRDI	2
Media.net	3
Mediatek	1
Mercedes	1

Micron	2
Mobisy	3
Morgan Stanley	8
Near Intelligence	1
Netapp	4
Nvidia	1
OTSI	1
Outdu	2
Рауи	2
Pega Systems	3
PlaySimple	1
Pure Storage	1
Qualcomm	22
Quess Corp	1
QuickSand	1
Rippling	4
RocketShip	1
Run India Run	1
Samsung	4
SAP	3
Scienaptic	3
Siemens	3
Siemens India	1
Siemens_EDA	1
Slice	3
Sortly	2
Synopsys	1
The Castle India	1
Traceable.ai	1
Uber	7
Udaan	1
Urban Company	4
Walmart	4
WD	8
Wells Fargo	1
Whatfix	2
Zorro Internet	1
КРІТ	3
Gram Vaani	1
Advansoft	1



International Institute of Information Technology Bangalore

# **TB** WE MISS YOU





# IN FOND REMEMBRANCE



# **Mr. Rish Dutt** passed away on February 16, 2023

IIIT-Bangalore was deeply saddened by the unexpected and tragic loss of Rishi Dutt (IMT2021001). His untimely passing has left a void in our campus community. Our thoughts and condolences go out to his family, friends and all those who knew him.





International Institute of Information Technology Bangalore

# **IIIT-B IN THE NEWS**







# ಸಂಯುಕ್ತ 🏽 <u>ಕರ್ನಾ</u>ಟಕ

# ರಜತ ಮಹೋತ್ಸವ : ಪ್ರವಾಹಮ್ ಕಾರ್ಯಕ್ರಮ

ಭಾರಕದ ವಿದ್ರ ಸಾಂಗೃತಿಕ ಶ್ರಕಾರಗಳ ಪ್ರದರ್ಶನದಂ ವಿದ್ಯಾರಿ-ಗಳಲ್ಲಿ ಗೃತ್ಯ, ಸಂಗತ ಪರಂದರೆ ಬಗ್ಗೆ ಅರದ್ರಿ ಮಾಡಿಸುವುದೆ ಸಹಕಾರಿಯಾ-ಗಲಿದೆ ಎಂದರು. ಮಣಿವರಿರ ಸೃತ್ಯ ಸಂಯೋಜಕ ಡಾ.ಮರಿಬರಿ ಸೃತ್ಯ ಸಂಯೋಜಕ ಪ್ರವಾಪದಿಂದ ಭಾರತೀಯ ಪ್ರಭಾವದಿಂದ ಭಾರತೀಯ ಪ್ರಭಾವದಿಂದ ಭಾರತೀಯ ಪ್ರಭಾವದಿಂದ ಭಾರತೀಯ ಪ್ರಭಾವದಿಂದ ಭಾರತೀಯ ಪ್ರಭಾವದಿಂದ ಭಾರತೀಯ ಹಿಡಿ ಮುದ್ದ ಸಂಯೋಧನೆ ಪಡೆಯಲೂ ಹಿಡ ವ್ಯಯ ಸಂಯೋಧನೆ ಪಡೆಯಲೂ ಹಿಡ ವೈಯ ಸುರೋಧನೆ ಪಡೆಯಲೂ ಹಿಡ ವೈಯ ಸುರೋಧನೆ ಪಡೆಯಲೂ ಹಿಡ ವೈಯ ಸುರಿತಿ ಎಂದು ವಿವಾದಿಸಿದರು.

. ಹೆಸಲ್ ಭಾರತದ ವಿವಿಧ ಸಾಂಕೃತಿ ಪ್ರಕಾರಗಳ ಮುವ ಸಮುದಾಯವು ಪ್ರಾಚೀನ ಕಲೆ, ಸಂಕೃತಿ ಪ್ರದರ್ಶನವಿಂಗಾಗಿ ಎದ್ದಾರಿಗಾಗು ನೃತ್ಯ ಸುರಾಜು ಮುತ್ತಿಗೆ ಪುರತಿ ಮುತ್ತಿಗೆ ಸುರ್ಯವಿ ಪ್ರಚಿಸರಿಯ ಅಧಿವ್ರ ಮಾಡಿಸುವು ಸುರಾಜು ಮುತ್ತಿಗೆ ಪುರತಿ ಮುತ್ತಿಗೆ ಸುರ್ಯವಿ ಮುತ್ತಿ ಸುರ್ಯವಿ ಮುತ್ತಿ ಸುರ್ಯವಿ ಸುರ್ಯವಿ ಮುತ್ತಿ ಸುರ್ಯವಿ ಮುತ್ತ ಸುರ್ಯವಿ ಮುತ್ತಿ ಸುರ್ಯವಿ ಮುತ್ತ ಸುರ್ಯವಿ ಸುರ್ಯವಿ ಮುತ್ತ ಸುರ್ಯವಿ ಮುತ್ತ ಸುರ್ಯವಿ ಮುತ್ತ ಸುರ್ಯವಿ ಮುತ್ತ ಸುರ್ಯವಿ ಸುರ್ಯ ಸುರ್ಯವಿ ಸುರ್ಯವಿ ಸುರ್ಯ ಸುರ್ಯ ಸುರ್ಯವಿ ಸುರ್ಯ ಸುರ್ಣ ಸುರ್ಯ ಸುರ್ಣ ಸುರ್ಯವಿ ಸುರ್ಣ ಸುರ್ಯ ಸುರ್ಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರಣದಿ ಸುರ್ಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರಣದಿ ಸುರ್ಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರಣವಿ ಸುರಣದಿ ಸುರ್ಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರಣದಿ ಸುರಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರಣವಿ ಸುರಣವಾ ಸುರ್ಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರಣದಿ ಸುರಣ ಸುರಣದಿ ಸುರಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರಣದಿ ಸುರಣ ಸುರ್ಣ ಸುರಣದಿ ಸುರಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರಣದಿ ಸುರಣ ಸುರಣ ಸುರಣದಿ ಸುರಣ ಸುರ್ಣ ಸುರ್ಣ ಸುರಣದಿ ಸುರಣ ಸುರಣ ಸುರಣದಿ ಸುರಣ ಸುರಣದಿ ಸುರಣ ಸುರಣದಿ ಸುರಣದಿ ಸುರಣದಿ ಸುರಣ ಸುರಣದಿ ಸುರಣ ಸುರಣ



ಅನೇಕಲ್ ತಾಲೂಕಿನ ಎಲೆಕ್ಸಾನಿಕ್ ಸಿಟಿಯ ಇಂಟರ್ರನ್ಕಾ ಪನಲ್ ಇನ್ಸ್ಟಾಟ್ಯೂಟ್ ಆಫ್ ಇನ್ಫರ್ಮೇಶ ಚಿಕ್ಸಾಲಜಿ ಸಂಸ್ಥೆಯ ರಜತ ಮಹೋತ್ಸವದ ಅಂಗವಾಗಿ ನಡೆದ ''ಪ್ರವಾಪವರ್'' ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಕ್ರಮದಲಿ ಮಣಿಮರಿ ನೃತ್ಯ ಪ್ರದರ್ಶನ ನೀಡಿದ ಕಲಾವಿದರನ್ನು ಸನ್ಜಾನಿಸಲಾಯಿತು.





ಷ್ಕಾ ಕನ್ 2023 ಕನುಕೆ ಕಸಿದ್ದರ ಮಯ್ಯ ಕರೆವ್ ಸ್ಟೋರಿಸ್ ಕಳ ಸುದ್ದಿಜಾಲ - ಭಾರತ ดู่ปิช อยมา ก่จกลไ

ಐಐಐಟಿ ಬೆಂಗಳೂರು ನಿರ್ದೇಶಕ ಪ್ರೊ.ದೇಬಬ್ರತ ದಾಸ್ಗೆ ಎಸ್ವಿಸಿ ಅಯ್ಯ ಸ್ಮಾರಕ ಪ್ರಶಸ್ತಿ By Mamatha M | Pe

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ೆ nin app Siddaramaian: ರಾಜ್ಯದಲ್ಲಿ ಬೆಹೆಸಿ ಎಲ್ಲಿದೆ ರೀ... ನಮ್ಮ ಪಕ್ಷಕ್ಕೆ ಯಾರೇ ಬಂದರು ಸ್ವಾಗತ: ಸಿದ್ದರಾದುಯ್ಯ

15 min an 5ಸ್ಕಾಂನಿಂದ ಸಿಹಿ ಸುದ್ದಿ: ಪ್ರತಿ ಯುನಿಟ್ ವಿದ್ಯುತ್**ಗೆ ₹**50 ಪೈಸೆ ನಿಯಾಯಿತಿ ಘೋಷಣೆ, ಯಾರು

ಕರ್ಣಬಕವಲ್ಲಿ ಶುಕ್ರ ಶೇರ 2023: ದೂರವಾಗಲಿವೆ ಈ 3 ರಾಶಿಯವರ ಬಸಕಿಗ

Southerst extends

JUSTIN (1)

MUST WATCH ()

ಬೆಂಗಳೂರು, ಅ.19: ಐಐಐಟಿ ಬೆಂಗಳೂರು ನಿರ್ದೇಶಕ ಸ್ಪೊ,ದೇಬಬ್ರತ ದಾಸ್ ಅವರಿಗೆ ಪ್ರತಿಷ್ಠಿತ ಸ್ಪೊ ಎಸ್ವನಿಸಿ ಆಯ್ಯ ಸ್ಮಾರಕ ಪ್ರಶಸ್ತಿ 2022 ದೊರಕಿದೆ. ಹೈದರಾಬಾದ್ ನಲ್ಲಿ ನಡೆದ ಇನ್ ಸ್ಟಿಟ್ಯೂಟ್ ಎಲೆಕ್ಸ್ರಾನಿಶ್ಸ್ ಮತ್ತು ಟೆಲಿಕಮ್ಯುನಿಕೇಶನ್ ಇಂಜಿನಿಯರ್ಸ್ (IETE) ನ 65 ನೇ ವಾರ್ಷಿಕ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಪ್ರಶಸ್ತಿ ಅನ್ನು ಪ್ರದಾನ ಮಾಡಲಾಯಿತು.

ಪ್ರೊ.ರಾಸ್ ಅವರ ಸಂಶೋಧನಾ ಮಾರ್ಗದರ್ಶನ ಮತ್ತು ದೂರಸಂಪರ್ಕ ಕ್ಷೇತ್ರದಲ್ಲಿ ಮಹತ್ವದ ಕೊಡುಗೆಗಳಿಗಾಗಿ ಪ್ರಶಸ್ತಿಯನ್ನು ನೀಡಲಾಯಿತು. ನಗದು ಬಹುಮಾನದೊಂದಿಗೆ ಪ್ರೊ. ದಾಸ್ ಅವರ ವಿಸ್ತಾರವಾದ ಕೆಲಸವನ್ನು ಒಳಗೊಂಡ ಪದಕ, ಪ್ರಮಾಣಪತ್ರ ಮತ್ತು ಪ್ರಶಸ್ತಿಯನ್ನು ಒಳಗೊಂಡಿರುವ ಪ್ರಶಸ್ತಿಯು ದೂರಸಂಪರ್ಕ ಕ್ಷೇತ್ರದಲ್ಲಿ ಅವರ ಕಾರ್ಯಕ್ಕೆ ಸಂದ ಗೌರವವಾಗಿದೆ.

ಬ್ರಾಡ್ಬ್ಯಾಂಡ್ ವೈದ್*ಲಿಸ್ ನೆಟ್ವರ್ಕನ ಮದ್ಯಮ ಪ್ರವೇಶ ನಿಯಂತ್ರಣ (MAC) ಪ್ರೋಟೋ*ಕ ಕ್ಷೇಕ್ರದಲ್ಲಿ ಕಾರ್ಯಕ್ಷಮತೆಯನ್ನು ಹೆಚ್ಚಿಸಲು ಮತ್ತು ಹರಿರು ಸಂವಹನವನ್ನು ಪ್ರಾರಂದಿಸಲು ಪ್ರೊ. ದಾಸ್ ಅವರು ಅಗಾಧ ಕೆಲಸ ಮಾಡಿದ್ದಾರೆ. ಟೆಲಿಕಮ್ಮುನಿಕೇಶನ್ ಕ್ಷೇಕ್ರದಲ್ಲಿ ವಿದ್ಯಾರ್ಥಿಗಳು ಮತ್ತು ಸಂಶೋಧನಾ ಅಧ್ಯಾಪಕರಿಗೆ ಪ್ರೇರೇಪಿಸುವ ಕೆಲಸ ಮಾಡಿದ್ದಾರೆ



ಪಜಾಮವಾಣಿ

# ಪ್ರವಾಹಮ್ ಸಾಂಸ್ಕೃತಿಕ ವೈಭವದ ಸಂಭ್ರಮ

# ಪ್ರಚಾವಾಣಿ ವಾರ್ತ

ಕ್ಷಾ ನಿಶ್ ತಾಲ್ಲೂಕಿನ ಎಲೆ ಕ್ಷಾ ನಿಶ ಸಹಿಯ ಬಂಟರ್ ಸಾನರ್ ಬರ್ಗ್ರಾಟ್ಯೂಟ್ ಅಫ್ ಪುರ್ಧೆಟೇಷನ್ ಟಿಕ್ನಾಂಬೆ ಸಂಸ್ಥೆಯ ರಜತ ಮಹೋತ್ವವದ ಅಂಗವಾಗಿ ರ್ಧವಾಹದ್ ಬ್ರಾಂಶೋರು ಸ್ಕಾಗಿಯ ಸಂಗೀತ ಮತ್ತು ಸೃತ್ಯ ಕಾರ್ಯಕ್ರಮವು ಸೋಮವಾರ ಸದೆಯತ್ತು ತನೇಕಲ್: ತಾಲ್ಲೂಕಿನ

ಆನೇಕಲ್: ಐಐಟಿಬಿ ರಜತ ಮಹೋತ್ಸವ

ಸೋಮವಾರ ನಡೆಯಿತು. ಡಾ.ಮಂಜು ಎಲಂಗ್ಯಾಮ್ ಮತ್ತು ತಂಡದಿಂದ ಅತರ್ಜಿಕ ಮಣಿವುರಿ ಸೃತ್ಯ ನಡೆಯಿತು. ರಾಧ ಕೃಷ್ಣರ ಸೃತ್ಯರೂಪಕ ಗಮನ ಸಕಿಯತು. ರಾಧ ಕೃಷ್ಣರ ಸೃತ್ಯರೂಪಕ ಸುರ್ಜಾಬಾಲಾತಾನು ರಾಧೆ ಸಾತ್ಯದಲ್ಲಿ ಪೊಕ್ಷಕರ ಮನ ಸೆಕೆದರು.



ಆಸೇಕಲ್ ತಾಲ್ಪೂಕಿಕ ಎಲೆಕ್ಟಾನಿಕ್.ಟಿಯ ಇಂಟಲ್ ಕ್ಲಾಫನಲ್ ಇನ್ಸ್ಟಟ್ನೂಟ್ ಆಫ್ ಇಸ್ಟರ್ಮೋಷನ್ ಟೆಕ್ನಾಲಜಿ ಸಂಕ್ಷೆಯ ರಜನೆ ಮತೊನ್ನವದ ಅಂಗವಾಗಿ ನಡೆದ 'ಪ್ರವಾಹಮ್' ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಕಲಾವಿದರು ಮಡವುರಿ ನೃತ್ಯ ಪ್ರದರ್ಶನ

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# 6ಜಿ ಸಂಶೋಧನೆಯತ್ತ ಚಿತ್ರ ಐಐಐಟಿ-ಬಿ ನಿರ್ದೇಶಕ ಪೊ. ದೇಬಬುತ ದಾಸ್ ಹೇಳಿಕೆ

SSSS24-20 ನಿ)ದರ್?ಶಕ ಪ್ರಾಲ. ಹೆಂಗಳೂರು 58 ಅನ್ನಸ್ಪ್ರಮತ್ತೆ 68 ಎಂತ್ರಕ್ಷಣದ ಸ್ಥ ಸಂಕೋದ ಸರ್ಗಾ ಅನ್ನಪ್ಪ ಎಂತರಿಕ್ಷೇರೆ ಪ್ರಾವಸ್ಥ ಶೈಟ್ (ಎಕಿಲ್) ಸುತ್ತು ಸಿಧಾರಿತ ಸಂಪರ್ಶ ವೃದ್ದಿಗಳು ಸ್ಥಾತವರ್ ಮ್ರಾಟ್ಟ್ಗಳ ಆಫ್ ಪ್ರಾವೆಗಳನ್ನು ಕ್ಷಿತಿಂಗಳು ಸ್ಥಾತವರ್ ಮ್ರಾಟ್ಟ್ಗಳ ಆಫ್ ಪ್ರಾವೆಗಳನ್ ಕೆಟ್ಟಾಗಿಕೊಡ ಎಂಗಳೂರು (ವಾಲಿಂ-ಲ) ಮುಂಬಗಳು ಬಿಕ್ಕೆ ಸಂಭಿತ ಸಿಧೆಯಲ್ಲಿ ಮಾಡಿಸಿದೆ ಸಂಕ್ಷೆಯಲ್ಲಿ ಪ್ರದೇಶದೇಶದ ಸಂಕ್ಷೆಯ ಸ್ಥಾತಗಳನ್ನು ಬಿಕ್ಕೆ ಸರಿಕಾರಿತ ಮತ್ತು ಕೊಡೆಯಿಂಡ್ ಅಥೆಗೆ ಸಿಧೆಗಳು ಕಡೆಸಿಕೊಳ್ಳುತ ಮೊಡೆಗಳಿಂದ ಕ್ಷಣೆ ಸಿಧೆಗಳು ತಿಮೆಗಳನ್ನು ತಮ್ಮ ಹಿಡ್ ವಿಧಿಯದ್ದೇ ಅಥೆಗೆ ವಿಧ್ಯ ಕೊಡೆಗಳನ್ನು ತಮ್ಮ ಹಿಡ್ ವಿಧಿಯದೇಶದ ಸಿಧ್ಯಾನ್ ಪಡೆಯಿತವಾದ ಸಾಶಿಕಾರಿತ ಹಳೆಗೆ ಸಿಧೆಗಳು ಸಿಧೆಗಳು ಸಿಧೆಗಳು ಮನೆಯವಾದ ಸಾಶಿಕಾರಿತ ಹಳೆಗೆ ಸಿಧೆಗಳು ಸಿಧೆಗಳು ಸಿಧೆಗಳು ಸಿಧೆಗಳಿಂದ ಸಿಧೆಗಳು ಸಿಧೆಗಳು ಸಿಧೆಗಳು ಸಿಧೆಗಳು ಮನೆಯವಾದ ಸಾಶಿಕಾರಿತ ಹಿಡೆಗಳು ಸಿಧೆಗಳು ಸಿಧೆ ಸ್ಮಾರ್ಟ್ ರೇಡಿಯೊ ಪರಿಸರ ಅರಿತುಕೊಳ್ಳುವುದು ಸದ್ಯದ ಪ್ರಮುಖ ಸವಾಲಾಗಿದೆ. ಇದು ಅನಿರೀಕ್ಷಿತ ವೈರ್ಲೆಸ್ ಪರಿಸರ ಆಪ್ಯಸಿಸಲು

ನಾರಕರ್ಗಾನ ಹಾದಿ ಕಾರುತ್ತಕ್ಕೆ ಪ್ರಾಲಿವೇ ಹಲಾರ ಅಧ್ಯವಸದ ಸಾಕಾರು ಹಾಡುತ್ತದೆ ಎಂದರು. ಐಬಿಟಿ ದೆಹಲಿಯ ನಿರ್ದೇಶಕ ಪೊ ರಂಗಸ್ ಬ್ಯಾನರ್ಜಿ, ಕಾರ್ಪೊರೆಟ್ ಬಿಪಿ ಮತ್ತು ಎಂದಿ ಸ್ಮಾಪ್ ಸರ್ ಸ್ಮಾನರ್ ಸೆಮಿಕಂಡಕ್ಷರ್ ಇಂಡಿಯಾ ರೀಸರ್ಜ್ ಸ್ ಸೌರಾಜನ್, ವಿಟಿ ತಜ್ಞ ಕ್ರಿನ್ ಗೋಪಾಲಕ್ಷ್ಯವನ್, ಐಐಬಿಟಿ-ಎ ಕಾಮೆಟ್ ಫೌಂಡೇನ್ ಸಿಕ್ಕಾ, ಪ್ರೊ.ಟಿ.ಕಿ.ಕ್ರೀಕಾಂಲ್ ಪಾಲ್ಗೊಂಡಿದ್ದರು.

ಅರ್ಪಿತಾಗೆ ವರ್ಷದ ವಿದ್ಯಾರ್ಥಿ ಪ್ರಶಸ್ತಿ ರದನ ತಿತಿಗೆ ಎರಡು ದು ಎದುತ್ತಿರುಗ ಬ್ರಿತಿಸ್ತಿ ವಿತರ ನಾಮಾಹ್ ಸ್ವಾರಕ ವರ್ಷದ ವಿದ್ಯಾರ್ಥಿ ಪ್ರಶಸ್ತಿ ಯನ್ನ ಅರ್ಶಿತಾ ಮಳವಲ್ಲಿ ಅವರಿಗೆ ನೀಡಲಾಯಿತು. ಇಸ್ ಕ್ರಿಟ್ನೂಟ್ ತನ್ನು, ನಿಷ್ಠಕ್ ಸೋಯಲ್, (ಬಂಬಟಿಕ್) ಮತ್ತು ವಿಸಾಯಕ್ ಝಾ (ಎಂಎಸ್ತಿ ಡಿಜಿಟಲ್ ಸೊಸೈಟಿ) ಅವರಿಗೆ ವಿತರಾಸಲಾಯಿತು.



ಘಟಕರ್ರಾರ್ಥಿ 322 ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಪದವಿ ಘಟಕೋತ್ಸದಲ್ಲ ಒಬ್ಬ 332 ನಿರ್ಧಾರಣಗೆ ಪದವಿ ಪಡೆದು. ಬಂಟೆಗೆಟೆಡ್ ಮತ್ತರ್ ಆಕ್ ಕ್ರಾಂತ ತ್ರೇಕ್ರಾರಿನಿಂದ 174 ಮಂದಿ, ಮತ್ತರ್ ಆಕ್ ಸ್ಟೇಸ್ ವ ಕಡಿಟಿಕ್ ಸೊಚ್ಚಿತಿ ಪ್ರೇಕ್ರಾಮಿಂದ 17 ಮಂದಿ, ಮತ್ತರ್ ಆಕ್ ಸ್ಟೇಸ್ವ ರೈ ರಿಂಪಣ್ ತ್ರೇಕ್ರಾರಿನಿಂದ 15 ಮಂದಿ ಮತ್ತು 11 ಮಂದಿ ವಿಎಸ್ & ಐದವಿ ಪಡೆದರು.



ನಗರದ ಐಐಐಟಿ-ಬಿ ಕ್ಯಾಂಪಸ್ ನಲ್ಲಿ ಛಾನುವಾರ ನಡೆದ ಸಂಸ್ಥೆಯ 23ನೇ ಘಟಿಕೋತ್ಸವದ್ದೇ ಐಐಟಿ ದೆಹಲಿಯ ನಿರ್ದೇಶಕ ಪೊ. ರಂಗನ್ ಬ್ಯಾನರ್ಜಿ ಅವರು ಸಾಧಕ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಪದವಿ ಪ್ರದಾನ ಮಾಡಿದರು. ಐಐಐಟಿ-ಬಿ ನಿರ್ದೇಶಕ ಪೊ. ದೇಬಬೃತ ದಾಸ್ ತಾಜರಿದ್ದರು.

ಘಟಕೋತ್ಸವದಲ್ಲಿ 332







**IIIT Bangalore holds annual workshop** Web Science for Development (WS4D 2023)

ore, 21 March 2023: The International Institute of Information Technology Bangalore (IITB) reschology institute in Bangalore hosted Web Schnie for Development (WS4D 2023) workshop saw professionals from several domains, addressing different thematic concerns pertaining to of web and modifies technologies in developmental efforts. ch saw professio use of web and r



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Over 4000 Learners graduate from CPE at IIIT Bangalore



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# IIITB develops platform to provide Aadhaar-like digital identities for 9 countries

### Jahnavi T.R. RENGALURU

Around 70 million citizens in Philippines (80% of the population) have enrolled on their national digital population national digital identity programme rolled out by Modular Open-Source Identity Platform (MOSIP), a digital identity platform developed by a team at the International Institute of Information Technology Bangalore (II-Information Bangalore (II-

Upon the request of World Bank to initiate research and development, the project provides digital identities similar to Aad-haar to underdeveloped and developing countries haar to underdeveloped and developing countries. So far, 16 lakh lines of code have been developed and used by countries for free



ce used for digital ation at MOSIP , IIITB SPECIAL

will all be within their own country and their policy; we will not interfere with it. We are providing digital identity for the world in a modular nature so that it can be customised. For in-stance, in Philippines, En-glish, and Filipino are the Although the project was first aimed at provid-ing MOSIP to five coun-tries, it has now been ex-tended to nine countries. Philippines, Morocco, Sri Although the

Lanka, Uganda, Ethiopia, Republic of Guinea, Sierra Leone, Burkina Faso, and Togolese Republic are the countries whose citizens will enroll. A team of 30, comprising top designers and others from software, database design, security and privacy departments, are working on the project at IIITB. languages used, while in Morocco, it is French and Arabic. Different countries have separate biometric needs and accordingly, the modular biometrics will be used," explained Debabra-ta Das, Director, IIITB, who

is also the Committee for the ecutive Committee for the project. Prof. Rajagopalan, presi-dent, MOSIP project, ad-ded that the project is high-ly scalable and secure. Developers have also fi-gured out a way to operate in 5,000- habitable islands of *billioniesa* dut haves at IIITB. "Along with technical know-how, we will also help the countries with technological training. Da-ta, privacy, and security will all be within their own in 5,000+ habitable islands of Philippines that have a poor Internet connection. The project is also being funded by Bill and Melinda Gates Foundation, Norad, Sir Ratan Tata Trust, Pra-tiksha Trust and Omidyar Network.







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### Digital Identity MOSIP's Country Conversations Two Day Workshop in IIIT Bangalore

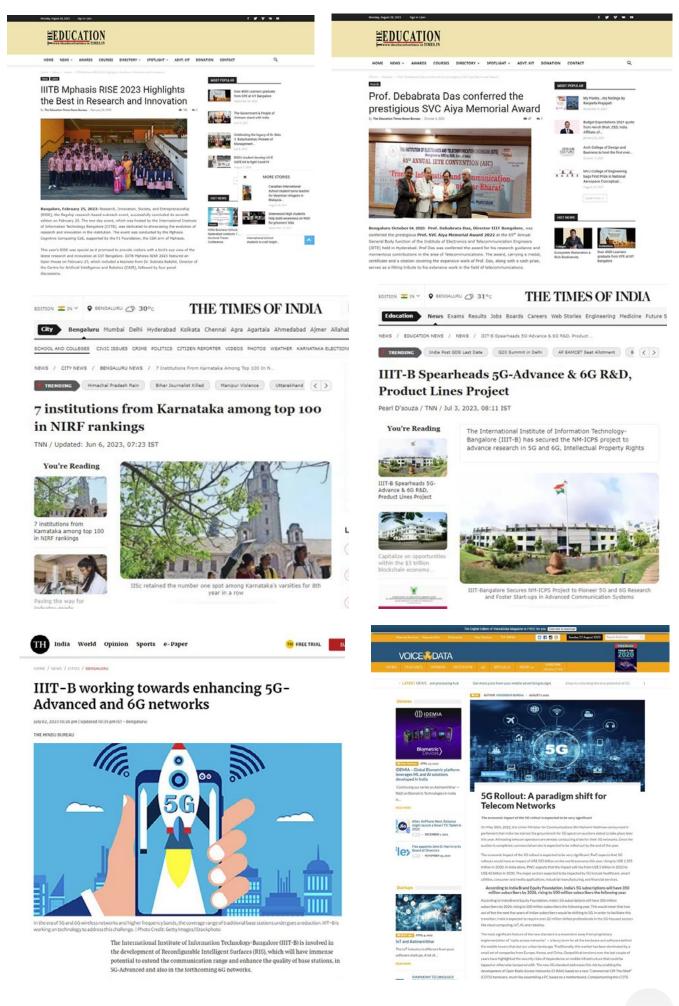
alled MOSIP Country Conversations 2023 at the Int logy Bangalore (IIITB) recently. Modular Open Sos



The workshop was inaugurated by Mr. Kris Gopalakrishnan, Chairman IIIT Bangalore Gover Body and Avilor Ventures, Prof. Debabrata Das, Director IIITB and Prof. 5 Rajagop. Presidence OM/XSP project. This was the first in person workshop post covid, aimed to pre MOSP-adopting countries.

he meet was envisioned as a forum to MOSP-adopting countries to share learnings a leadback with the MOSP team and fellow country partners. In addition, the 2-day ew lowed for the exchange of knowledge and lessons with other advisors and stakeholders a lowgistron on MOSP succession for the 1-

ed. 5 Rajagopalan, President MOSP, addressing MOSP Country Connect Workshop said, MOSP Country Conversations was a great opportunity to build a community of MOSP dopting countries, commercial and academic partners, and stakeholders in the project. The extends and recommendations we have received from countries, will guide subOSPs work.



# **BWEDUC**<sup>TION</sup>



feeling low, anxiety, relationship issues

Ever since its inception in October 2022, the Karnataka Tele Mental Health Assistance and Networking Across States (Tele-MANAS) service cell has so far received over 1,317 callers in need of mental health assistance.

### NEWS EXPERTS

### CGI Offers Scholarships for Exceptional Girl Students at IIITB By NE R rter on October 31, 2022



BANGALORE: CGI has partnered with the International Institute of Information Technology Bangalore (IIITB) to provide scholarships for top-performing girl students. The scholarship aims to support girl students exploring careers in technology, an area where women are underrepresented.

The scholarship will support 20 girl students pursuing an integrated programme, which includes both graduate and post-graduate programmes, at the institute. As part of the scholarship, CGI will fully fund their tuition fee for the first semester.







# Home States Karnataka Using next gen technology will make graduates industry-ready: Expert

RISE also had a number of demos, particularly showing areas of digital identity and security, data, and environmental sustainability.



Image used for representation. (Express Illustrations | Somyadip Sinha)

### **IIIT Bangalore Bestowed Silver Jubilee Icon** Award at the Bengaluru Tech Summit 2022



Bengaluru November 21, 2022: International Institute of Information Technology Bangalore (IIITB) received the Silver Jubilee Icon Award at the Bengaluru Tech Summit, 2022. The award recognized IIIT Bangalore for its contribution to the journey of Kamataka's State and for playing a crucial role in the development of technology, research, policy and technical committees in making Bengaluru City the most sought-after destination in India. IIIT Bangalore was also recognized for being one of Kamataka's major contributors to the state economy, by helping generate significant employment and positioning Kamataka's as a global hub.

The 25<sup>th</sup> edition of Bengaluru Tech Summit received 4.52 lakh visitors in person and 4.99 crore people virtually. Prime Minister Narendra Modi inaugurated the event virtually. Prof. Debabrata Das, Director, IIIT Bangalore and Prof. Chandrashekar Ramanathan, Dean (Academics), IIIT Bangalore received the award from Karnataka Chief Minister, Basavaraj Bornmai.



# ज्ञानमुत्तमम् : Chapter 14, Bhagavad Gita, Verse 1

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