Birendra kumar

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Github   - https://github.com/Birendra848
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PROFESSIONAL SUMMARY

Results-driven UAV Engineer with hands-on experience in developing autopilot systems, navigation drones, and business intelligence solutions. Proficient in programming languages such as Python. Adept at leveraging technology to automate workflows and enhance data analysis. Strong problem-solving skills and a passion for UAVs, Drones, Artificial Intelligence and Robotics.

EXPERIENCE

Aero360 - Dronix Technologies Pvt Ltd Chennai— *UAV Systems Engineer*

Dec 2023 – Jan 2024

- Developed a sub-250g Nano Autonomous Surveillance UAV.
- Developed an Antenna Tracker that significantly increased the effective communication range for video, telemetry, and control to 15 kilometers.
- Embedded Python programs within the mission planner to automate DOOAF tasks.

InsideFPV Surat— *Robotics Engineer*

Aug 2023 - Oct 2023

- Collaborated with a cross-functional team on a GPS-less navigation drone using Modal AI's Voxl Flight Deck, implementing cutting-edge technology for precise positioning and navigation.
- Designed and programmed companion computers using Python to enhance drone functionality and performance.
- Worked on UAS (Unmanned Aerial System) hardware, software, and sensors to achieve project objectives.

Tata Consultancy Services (TCS) Bangalore — *Assistant System Engineer*

Oct 2021 – Aug 2023

- Played a key role as a Business Intelligence Developer, specializing in data analysis and automation.
- Leveraged Alteryx for efficient data handling, data analysis, and reporting, resulting in streamlined business processes.
- Managed ad hoc file transfer, data collection, and data manipulation requests, ensuring data accuracy and availability.
- Collaborated with stakeholders to understand data requirements and provide actionable insights for decision-making.

EDUCATION

IIIT Bangalore (2024-Present)

- Master of Science by Research in Data Science.

Nalanda College of Engineering, Chandi (2017-2021)

- B.Tech in Computer Science and Engineering (CGPA – 7.28)

INTERESTS

UAVs, Drones, AI, ML, Robotics, Music, Volleyball

PROJECTS

Quadcopter Build, Flight Controller Software
  - Led the development of flight controller software for quadcopters.
   - Implemented PID controllers and interrupts.
   - Created software in Python for geo-tagging photos on Raspberry Pi.
   - Project Link:
https://github.com/Birendra848/Flight_Controller

EDA - Hotel Booking Analysis —

   - Analyzed Hotel Booking Data with 31 variables and 1,19,210 observations.
   - Conducted data cleaning and exploratory data analysis to derive meaningful insights.
   - Identified factors affecting bookings and cancellations.
   - Project Link:
https://github.com/Birendra848/hotel-booking-analysis

TECHNICAL SKILLS

- **Autopilot Systems:** Ardupilot, Pixhawk
- **UAV Configuration**: Hardware and Software
- **ROS, Gazebo Simulation**
- **Programming Languages:** C++, Python
- **Visual Slam**
- **Software Development**
- **Data Analysis**

SOFT SKILLS

Communication(Hindi & English) , Teamwork , Flexibility , Confidence , Problem Solving

CERTIFICATES

PCAP - *issued by CISCO , Score - 103/110*
 Programming Essentials in Python by CISCO .

DBMS – *issued by NPTEL , Score - 66%*
 Elite certificate - Database Management System

CERTIFIED FULL-STACK WEB DEVELOPER- *IIT Kanpur, E & ICT ,* Score – 87%

Alteryx Foundational Micro-Credential
Certification Link -
https://www.credly.com/badges/b15e49de-8d91-4400-99e5-af48f27a8d08/linked_in?t=rms1t4