UDAY SANKAR MUKHERJEE

I am a passionate RPA developer, robotics and IoT enthusiast, junior researcher, and future IEM'25 graduate who thrives on creating innovative hardware projects while mastering microcontrollers and microprocessors.

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🅟 **UdaySMukherjee**

EXPERIENCE

Drones and Robotics Intern
IEMA Research & Development PVT. LTD.

📅 November 2022 - June 2023   📍 Kolkata

- Made a Fully Functional Hexacopter And Implemented Computer vision and Sensors Interface.
- Worked with an NHS Project Implementing RPA for Patient Data Management.

PROJECTS

IOT-BASED AIR QUALITY MONITORING SYSTEM

📅 MAY 2022

Patent Filed *APPLICATION NO. :202231024776*
- Sensor Interface to take daily Dataset of our surrounding air quality from specific Sites.
- Used Thingspeak Cloud to upload data so that it's accessible to a local Website where anyone can Check the Daily Estimated Air Quality.
- Predicting the Upcoming Air Quality and Plotted it On Real data.

Visual Feature Extraction in Augmented and Virtual Reality
Innovative Project

📅 September 2022 -Present

- Taking Smartphone Camera Feed and Performing Computer vision Algorithms on it.
- Extracting different Features From a Room Blueprint and Performing GANN to generate a Variety of Custom Objects.
- Overlaying these Objects on real Objects and Hence creating a Virtual Enviornment From a Smartphones camera.

Automated 5 d.o.f. Robot
Flipkart grid 5.0

📅 September 2023

- The Robot takes in packages from a basket and Decides which class of Package it belongs to.
- After that it checks for QR code position by rotating it All sides.
- Finally it keeps the package on the final position with QR on the top side.

EDUCATION

BTech in Computer Science, Artificial Intelligence & Machine Learning
IEM Kolkata

📅 September 2021 – Present   SGPA:9.54

CBSE Class XII
Hariyana Vidya Mandir, Saltlake

📅 June 2021   92.4%

SKILLS

C/C++   C#   Python   MicroPython
Arduino   ArduPilot
Thingspeak   Blynk   UiPath
Selenium   HTML/CSS
OpenCV   GANNs   CNNs   PyTorch

POSITION OF RESPONSIBILITY

- IEM IEDC| Inventory Team Lead & Robotics Domain Lead-
  Did projects on IoT, and Drones .
- CEDS| Team Member-
  Currently doing projects on BCI and ARVR.

ACHIEVEMENTS & CERTIFICATES

- JOY OF COMPUTING USING PYTHON:
  IIT, Madras - (Elite+Silver)