SHYANTAN KUNDU

Kolkata, West Bengal, India

📞 +91-91239 54154 ✉ shyantan5@gmail.com 💼 LinkedIn ⭘ Github

EDUCATION

Institute of Engineering & Management, Kolkata   **2022 – Present**
*B.Tech - Computer Science and Engineering - **CGPA** - **9.69***   *Kolkata, West Bengal*

COURSEWORK / SKILLS

- Computer Networks
- DSA
- OOPS concepts
- Software Engineering
- DBMS
- Operating Systems
- Microcontroller Coding
- IoT
- Sensor and Electronics
- Green Energy and Recycling Technologies

EXPERIENCE

Student Researcher at IEM Institute of Fundamental Research   **March 2024 - Present**
Role - Micro-controller Developer, Team Lead   *Kolkata, India*

- Automated "Waste Oil Recycler," reducing manual labor by 90% and increasing efficiency by 75%.
- Prototyped 3 IoT systems with STM-32, ESP-32 & Arduino Mega-2560 architectures successfully.
- Developed 100% functional prototype in 3 months, resulting 1 research paper,6 business pitches, and 1 patent.

Virtual Intern at AWS Academy, Amazon   **May 2023 - July 2023**
Role - Cloud and AI/ML Intern   *Remote*

- Completed Cloud and Machine Learning Foundation course, gaining hands-on experience with AWS tools.
- Acquired proficiency in AWS Sagemaker and cloud computing principles.

PROJECTS

Online Dashboard for Vehicle-to-Everything Networking | HTML, CSS, IDE- VS Code   **2024**

- Designed a 5-page dashboard with extended suite of 60+ features improve vehicle communication by 70%.
- Implemented pages for Registration & Statistics, Road & Weather Conditions, Varied Emergency assistance.
- Published a research paper on Vehicle-to-Everything (V2X) communication and interfaces.

Waste Oil Recycler | Embedded C, IDE - STM-32 CubeMX   **2023-24**

- Scripted STM-32 code for Automation increasing operational efficiency upto 70%.
- Integrated embedded Electronics & designed circuits lessening 50% computational overhead.
- Developed Modular Recycler for Used Lubricant with ~85% volumetric recovery and 8% quality improvement.

Magnetic Lock Sensor | Embedded C, Bluetooth Serial, IDE - ArduinoIDE   **2023**

- Innovated anti-theft device with Magnetic sensitivity & Bluetooth, reducing chances of luggage theft by 70%.
- 2-way secured Instantaneous Alarm increasing User alertness by 85% with 30 hrs+ battery backup.

Heart Rate Monitor | Embedded-C, JSON, HTTP-Client, Flask, IDE - ArduinoIDE, Python   **2024**

- 24/7 Heart Health monitoring IoT device with 90% on-board analysis.
- Predicted heart disease risk with up to 87% accuracy.

E-Commerce Pizza Delivery Website | HTML, Agile- MS Excel, IDE - VS Code   **2024**

- Led e-commerce website development, improving user experience by 40%.
- Coordinated scrums, applied Agile methodologies with 70% faster development.

Number Guessing App | MATLAB App   **2023**

- Built a tactical number-guessing game with 3 input modes, increasing user engagement by 40%.

Multi-function Calculator | MATLAB App   **2023**

- Developed a robust 12-function calculator, improving calculation accuracy by 25%.

TECHNICAL SKILLS

Languages: C, Embedded-C, SQL, Python, C++
Technologies/Frameworks: Micro-controllers, IoT, Sensors, Automation, ML, HTML5, CSS3, MySQL
Tools: Dev C, Arduino IDE, STM32 CubeMX, MATLAB, LTSpice, Python IDLE, Canva, VS Code, MS Office

CERTIFICATIONS

NPTEL - Computer Networking & Internet Protocol, Database Management System, Electric Vehicles (Part-1), Computer Vision & Image Processing