

SAYAN KARMAKAR

Kolkata, India

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Experience

Qualcomm - Associate Software Engineer

January 2023 – Present

5G Team - IP Multimedia Subsystems (IMS)

Bangalore, India

- Working on the HLOS/Client Side on the development of a framework to transfer data/log packets from devices to the server.
- Development, solving the issues and unit testing for various parts of the framework.

Airbus - Associate Software Engineer

July 2022 – January 2023

Department of Avionics Software and System Testing

Bangalore, India

- Involved in **Software Development Life Cycle (SDLC)**, starting from requirement gathering and performed **Object Oriented Analysis** and Design for development of key interfaces. V Life cycle Development Life cycle has been followed.
- Designed and implemented various classes and methods to increase the performance of the existing software for the **Flight Warning System**.
- Experienced with stand-up, retrospective, demo, planning and code review meetings.
- Created G-sites and custom components for communication and collaboration within Airbus.

Research Projects

Low-cost air pollution monitoring device based on air quality index | [Link](#)

- Tested I/O devices in IoT truck system.
- Worked on particle hardware to collect and transmit sensor data to the cloud.
- Worked with various Mathematical Methods to increase the accuracy of the system.

Development of an IoT based robust architecture for environmental monitoring using UAV | [Link](#)

- Finalised the complete architecture and developed design documents for monitoring any areas' various gases using different sensors.
- The Hub's System is made robust and ready to function if Swarm Architecture is implemented.
- Developed and supported web applications to display IoT Sensor data on user interface.

Technical Skills

Programming Languages: C/C++, Python, Java, ADA, Pascal

Networking: TCP/IP, ARINC, Zigbee, MQTT, Bluetooth

Microcontrollers and Microprocessors: Arduino, Raspberry PI, 80186, 386, 486

Chain/Configuration Management: Git, VAX/VMS, Pagode, gPM-Sumo

Development Environment: VS Code, PyCharm, Anaconda Spyder, Eclipse, Notepad++

Operating System: Windows, Unix, Linux, MacOS

Education

Jadavpur University

2018 - 2022

B.E.(Hons) in Instrumentation and Electronics Engineering (CGPA of 8.36)

Kolkata, West Bengal, India

Katwa Bharati Bhaban

2017

WBCHSE (Class XII) (Percentage: 82.20%)

Katwa, West Bengal, India

Bidhan School

2015

ICSE (Class X) (Percentage: 89%)

Durgapur, West Bengal, India

Course Works

- Computer Networking
- Artificial Intelligence
- Digital Electronics
- Operating Systems
- Data structures and Algorithms
- Database Management System