

Professional Profile

Aspiring final-year Computer Engineering student with both academic and professional experience in the domain of Embedded Systems. I possess deep technical knowledge in the domain of Embedded systems and IoT, including hardware as well as software development, alongside having know-how in Systems Design and Computer Architecture. I have profound interest in Automobiles, Aviation and Space-Technology, with ambitions to work in the respective sectors.

Core Skills

- Linux
- Communication Protocols
- ARM / RISC-V Architecture
- Web Development
- Sensors / Actuators
- AI / ML
- IoT Stack
- x85, x86 MPU, 8051 MCU
- RTOS
- C / C++ / Java / Assembly Language
- PCB Designing using KiCAD
- Arduino

Education

- **Bachelors in Computer Engineering** | Government Engineering College, Gandhinagar, Gujarat, India. | Sept. 2020 – May 2024 | Current CGPA : 8.17
- **Higher Secondary Education** | Bright School, Vadodara, Gujarat, India. | May 2020 | Percentile Rank : 96 pr.

Career Summary

- ❖ **Embedded Systems Intern** | Galanto Innovations Pvt. Ltd, Research Park, IIT Gandhinagar, Gujarat, India | On-site.

Outline

I worked as an Embedded Systems Intern for Galanto Innovations Pvt. Ltd. which is a rising organization in the MedTech industry. They perform research as well as manufacture rehabilitation devices which patients can wear and play exercise-related games on their software while doing exercise. My job was to design algorithms for precise hand movement tracking as well as design PCB prototypes for their upcoming products, as well as learn to read datasheets and extract meaningful information from it.

Key Responsibilities

- To interface IMU Sensors with Arduino and program them for data extraction.
- To design algorithms for precise hand movement tracking.
- To design algorithms for noisy data filtering.
- To design PCB in KiCAD for their future products.
- To perform Sensor calibration and testing.

Key Achievements

- Developed a compact PCB that can fit an IMU sensor on the knuckle of hand.
- Developed programs in C/C++ which were used for device calibration.
- Represented the organization at National Tech Expo.

❖ **Data Analytics Intern | IBM CSRBox | Remote.**

Outline

Enrolled for IBM SkillsBuild internship program for data analytics domain. I was mentored by experts in the field of Data Analytics and Machine Learning and we were made familiar with all the methodologies used in the domain. The internship focused on inculcating the methodologies of Machine Learning to solve the modern world problems.

Key Responsibilities

- To develop a Deep-Learning model which can predict the area of polar ice sheet extensions in the upcoming 120 days from the day of enquiry.
- To envision the efficient usage of Machine Learning models for prediction and problem solving.

Key Achievements

- Represented our team and pitched our Deep-Learning model at the National level and won 2nd prize.

Projects and Certificates

- ❖ PCB Design Certification – Pantech Institute.
- ❖ 555 timer badge ID card.
- ❖ Prototype of 8051 Microcontroller.
- ❖ Remote Controlled Quadcopter (In-progress).

All projects are available on my GitHub page, which can be viewed from [here](#).

Hobbies and Languages

- ❖ Diploma in Indian Classical Music (Vocal and Piano).
- ❖ Chess.
- ❖ Content Writing.
- ❖ Public Speaking.
- ❖ Travelling, exploring new cultures and networking with people.
- ❖ Languages known (full proficiency) : English, Hindi, Gujarati, Marathi.