

Harsh Kakadiya

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☎ 8128757827

📅 14/09/2001

🎓 EDUCATION

Bachelor of Technology in Electrical Engineering,

Sardar Vallabhbhai National Institute of Technology

2019 - 2023

CGPA: 8.77

B. Tech (Minor) Degree in Electronics & Communication Engineering,

Sardar Vallabhbhai National Institute of Technology

2019 - 2023

CGPA: 8.33

🧠 SKILLS

Programming (C, Embedded C, Python, Verilog & Assembly level)

Circuit Designing & Simulation (MATLAB, Proteus, KiCAD, Atmel Studio, EasyEDA & LTspiceX)

Robotics and Embedded System (Robot Operating System (ROS), 8051, ATmega32, Arduino, Raspberry Pi & Sensor Interfacing, BMS, C8051F120)

Soft Skills (Critical thinking, Time Management, Quick Learner, Leadership & team building skills)

Excellent command on (Digital Electronics, Analog Electronics, Microcontroller, Computer Architecture)

🏠 POSITION OF RESPONSIBILITY

DRISHTI - A Revolutionary Concept, Treasurer

08/2020 - 05/2023

- Developed and mentored **10+ embedded system related projects**.
- Managed finances of **35 projects and 5 events**.
- Led a team of **150 members**.

Mindbend, 2022, Head of Technical Committee

11/2021 - 04/2022

- Organized and managed **20+ technical events**.
- Led a team of **70 members**.

🛠 PROFESSIONAL EXPERIENCE

Project Trainee, TVS Motor Company

05/2022 - 07/2022 | Hosur, India

- Project Name:** Complete Design Validation & Proving of K06 Battery Pack
- Department:** New Product Development - BMW

Electronics Intern, Greenvolt Mobility LLP

06/2021 - 07/2021 | Ahmedabad, India

I worked on **embedded c** programming of motor controller TMS320F28027FPTT, **design analysis** of buck converter LM5008, and developing voltage indicator.

📁 PROJECTS

Warfare Assistance Robot, Mentor Lead

11/2021 - 09/2022

- Developed an all-terrain **autonomous robot** aimed at assisting the Indian armed forces. It is capable of carrying out tasks like **equipment transfer, shielding system, fire extinguishing, navigation, and area surveillance**.
- Represented our college and won **2nd prize at Techexpo** organized by IIT Guwahati.

Lower Limb Powered Exoskeleton, Electronics Lead 🔗

12/2020 - 03/2022

- Developed a brace suite containing support structures with mechanisms that **help people** suffering from lower body neuromuscular, autoimmune, or progressive dystrophy diseases by supporting the lower body and powering the motions with **sensored control**.
- Represented our college at Robofest 2.0 organized by GUJCOST and **secured 2nd rank** with total prize money of INR **3.5 L**.
- Granted **design patent** and got featured in **3 different newspapers**.

Fire Alarm System, Mentor Lead 🔗

03/2021 - 04/2021

- Designed a fire alarm device using **ATmega32 microcontroller**, GSM Module, MQ2 gas sensor, and bmp180 temperature sensor that can deliver a warning SMS directly to our cell phones.

📖 PUBLICATIONS

Reliability of Smart Grid Including Cyber Impact - A Case Study, IGI Global 🔗

Artificial Neural Network Modelling for Short Term Load Forecasting, IEEE 🔗

Analysis and Prevention of Denial of Service Attacks in Smart Grid using IoT, Springer 🔗

Hourly Load Forecasting Using Sequence-to-Sequence LSTM based Deep Machine Learning Model, Springer 🔗

🏆 ACHIEVEMENTS

- Published **4 research papers** and **2 design patents**.
- Cleared **GATE (EE, EC), 2023** with **AIR under 800**.
- Cleared **JEE Mains** with **AIR 5051** and **JEE Advance** with **AIR 10860**.
- Runner up at Robofest 2.0** and cleared the **design stage** in **Robofest 3.0** under **2 different categories**.