GAURAV DIKEY

• Amravati, Maharashtra, India • gauravdike93@gmail.com • 8767860824 • LinkedIn

SUMMARY

- Electrical Engineering undergraduate with extensive expertise in embedded systems, power electronics, control systems, automation and hardware prototyping.
- Adept at utilizing tools like Arduino, ESP32, KiCad/AutoCAD Electrical for circuit design and PSpice, Tina-TI, Proteus, MATLAB for simulations.
- Eager to contribute in electrical and electronics field with design and hardware integration skills to drive innovative, real-world solutions.

EDUCATION

Government College of Engineering, Amravati.

Bachelor of Technology (B.Tech) in Electrical Engineering & Minor in Internet of Things (IoT) | 2023 -2027

TECHNICAL SKILLS

Embedded Systems: Programmed microcontroller. Hands on electronic components. C Programming.

Power Electronics & Systems: Evaluated power electronics for rectifier, inverter, converters. Power systems for grid stability and protection by analyzing short circuit conditions, circuit breakers, and relay operations.

Industrial Automation: Programmed PLCs for automated process control and utilized SCADA systems for real-time remote monitoring and data acquisition.

Automotive Engineering (SAE eBAJA): Applied hands-on electric vehicle design and hardware integration.

WORK EXPERIENCE

Summer internship at Paras Thermal Power Station (MSPGCL)

- Gained hands-on exposure to large-scale electricity generation and observing the operational workflow across the 2x250 MW boiler-turbine-generator (BTG) units.
- understand PLC, DCS, SCADA architectures, and real-time monitoring of automated thermal plant parameters.
- Examined essential auxiliary operations—including Coal Handling Plants (CHP), Ash Handling, and water treatment—while learning plant safety protocols and industrial maintenance practices.

PROJECT

ESP32-Based Single to 3-Phase Variable Frequency Drive (VFD)

- This project focuses on designing and simulating an ESP32-controlled VFD to convert single-phase power into adjustable three-phase power.
- It allows for precise speed and torque control of 3-phase induction motors through smart programming.

Flyback Converter Design and Simulation Using LM5023

- This project involves modeling and simulating a highly efficient AC/DC flyback converter utilizing Texas Instruments' LM5023 controller chip. It features quasi-resonant switching to reduce energy loss and provide stable, isolated power for low-voltage applications.

ACHIEVEMENTS

- **National Hardware Hackathon Runner-Up:** Secured 2nd place in a highly competitive 48-hour national hardware hackathon by rapidly designing and programming a fully functional physical prototype under strict time constraints.
- **SAE eBAJA Competition :** Engineered the electrical architecture for an off-road electric buggy, successfully clearing the rigorous Electrical Technical Inspection (TI) with more achievements.