VARLA BUGGAIAH

varlabuggaiah1@gmail.com | Portfolio | LinkedIn | GitHub | +91 7569357261

Professional Summary

Proactive final-year B.Tech Electronics and Communication Engineering (ECE) student with a strong academic background. Possesses a versatile technical skillset spanning software development (Python, SQL) and hardware integration (IoT, Arduino). Passionate about solving technical challenges, seeking an entry-level position in IT or Core Engineering to leverage diagnostic skills and programming expertise.

Education

B.Tech in Electronics and Communication Engineering
Siddhartha Institute of Engineering and Technology, Ibrahimpatnam, Telangana.   2022 - Present
CGPA: 8.24

Senior Secondary Education
Government Junior College, Doma, Vikarabad, Telangana.   2020 – 2022
Percentage: 90

Technical Skills

- **Languages:** Python, SQL(MySQL), C Programming

- **Hardware & IoT:** Arduino, IoT Sensors, Circuit Design, VLSI Basics

- **Tools & Platforms:** VS Code, Git, GitHub, Streamlit, Google Vertex AI

Projects

AI Chatbot Web App | Python, Streamlit, OpenAI API   Demo
- Engineered an intelligent AI chatbot using Python and Streamlit, featuring session memory for context retention.
- Integrated the backend with OpenAI API to facilitate dynamic, real-time dialogue and user support

Smart Home Energy Monitoring | IoT, Arduino, Sensors
- Developed a system to track home electricity usage in real-time using current sensors and Arduino logic.
- Enabled data-driven insights to promote energy conservation and reduce household electricity costs.

Smart Plant Watering System | IoT, Automation
- Constructed an automated irrigation system utilizing soil moisture sensors to monitor plant health.
- Programmed the Arduino controller to trigger watering automatically, optimizing water usage.

Certifications

Introduction to Generative AI | Simplilearn (2025)
- Learned prompt engineering and model fine-tuning using Google Vertex AI.

VLSI Design Flow: RTL TO GDS | NPTL (IIT Madras & IIIT Delhi) (2025)
- Completed a comprehensive 12-week curriculum on VLSI physical design, mastering the workflow from RTL synthesis to GDSII layout generation.

Data 101 | IBM Cognitive Class (2025)
- Acquired foundational understanding of Big Data concepts, the Hadoop ecosystem, and data processing workflows.

Achievements

Winner: Project Expo– Magistech, MGIT	**Sep 2023**
Winner: Poster Presentation – Rudrasandhaan, AVN IET	**Mar 2024**
Winner: Paper Presentation – Siddhahastha, SIET	**Mar 2024**
Winner: Poster Presentation – LORDS	**Apr 2025**
Winner: CineQuiz – IEEE Fusion Fest, GNIT	**Aug 2025**

Hobbies

- Screenplay Writing
- Scribbling