VARLA BUGGAIAH

buggaiah7733844@gmail.com
varla-buggaiah-portfolio.netlify.app — LinkedIn — GitHub
Phone: +91 7569357261

Professional Summary

Final-year Electronics and Communication Engineering student with a strong foundation in Embedded Systems, AI/ML, and Full-Stack Development. Proven skills in building practical solutions and leading projects from concept to deployment. Actively pursuing roles in software development, AI/ML, and embedded systems.

Education

Siddhartha Institute of Engineering and Technology, Ibrahimpatnam, Telangana
B.Tech in Electronics and Communication Engineering **Jun 2022**
CGPA: 8.2 / 10.0 (Ongoing)
Expected Graduation: May 2026

Technical Skills

- **Languages:** Python, C, Java, HTML, CSS, JavaScript
- **Frameworks & Tools:** Streamlit, Pandas, NumPy, OpenCV, Git, VSCode
- **Databases:** MySQL
- **Platforms:** GitHub, GitHub Pages, Streamlit Cloud
- **Languages Known:** English (Fluent), Telugu (Native), Hindi (Basic)

Certifications

- **Introduction to Generative AI – Simplilearn (2025)**
  Completed a comprehensive Generative AI course, gaining hands-on experience with Google's Vertex AI platform. Proficient in prompt engineering (zero-shot, one-shot, few-shot), fine-tuning models using Generative AI Studio, and developing applications with the Vertex AI SDK for Python.

- **VLSI COURSE – Simplilearn(2025)**
  Completed a foundational course in Very Large Scale Integration (VLSI) design, covering semiconductor principles, transistor-level logic, and the design of combinational and sequential circuits. Gained familiarity with industry-standard EDA tools (e.g., Cadence) and an understanding of key design challenges and future trends.

Projects

1.Portfolio Website
Developed and deployed a personal portfolio using HTML, CSS, and JavaScript. Showcases projects and skills.
URL: varla-buggaiah-portfolio.netlify.app

2.AI Chatbot Web App
Built an AI chatbot using Python and Streamlit with session memory. Integrated backend with OpenAPI for dynamic dialogue.
Demo: Streamlit Chatbot App

3.Line Follower Robot
Designed and built an IR sensor and Arduino based autonomous robot that follows lines and avoids obstacles, suitable for warehouse delivery and surveillance.

4.Smart Plant Watering System (Real-time Project)
Implemented an IoT-based automatic irrigation system using Arduino and soil moisture sensors to monitor and water plants efficiently.

5.Smart Home Energy Monitoring (Mini Project)
Created a system for tracking and managing home electricity usage using current sensors and Arduino, promoting smart energy conservation.

6.Temperature Converter GUI Application
- Developed a desktop GUI application using python and TKinter for real-time temperature conversions; packaged the script into a standalone executable (.exe) with PYInstaller for deployment.
- Managed the project with Git for version control, documenting a complete development lifecycle from initial commit to final product on a public GitHub repository.

7.Number Guessing Game GUI
- Engineered an interactive GUI game in Python and Tkinter, featuring random number generation, dynamic user feedback, attempt tracking, and a "Play Again" game loop.
- Implemented robust state management to control UI elements and integrated user-friendly features like 'Enter' key submission and error handling for non-numeric input.

Achievments

1. Sep 2023: 1st Prize, Project Expo– Magistech, MGIT

2. Feb 2024: 2nd Prize, Poster Presentation– Techera, Sri Indhu IET

3. Mar 2024: Winner, Poster Presentation– Rudrasandhaan, AVN IET

3. Apr 2025: Winner, Poster Presentation– LORDS

4. Mar 2024: 2nd Prize, Paper Presentation– Siddhahastha, SIET

5. Aug 2025: Winner, CineQuiz – IEEE Fusion Fest, GNIT