

Gururajan Ganesh Babu

Student

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🔗 [My Portfolio](#) 🐙 [My Github](#)

Objective

ECE & Data Science undergraduate who enjoys turning complex problems into working systems. Experienced in Python, data structures, machine learning concepts, and simulation-based projects, with a strong interest in Data Science and intelligent software. Looking to contribute, learn fast, and build solutions that create measurable impact.

Internships

Intern, Beau Roi Technologies Private Limited 🔗

The project analyzed HR data, for 500 employees across different departments, with the goal of recognizing workforce indicators related to: Engagement, Attrition, Performance, Well-being

Intern, NIELIT Virtual Academy 🔗

- Predictive “Device Health” Monitor for Household Appliances.
- This project focused on designing an IoT-based monitoring system that continuously collects real-time performance data from household appliances such as voltage levels, current consumption, temperature patterns, and usage cycles.

Education

B.Tech - ECE with specialization in Data Science,
SRM Institute of Science and Technology, Ramapuram, Chennai

06/2024 – Present
Chennai, Tamilnadu

Skills

Technical

Python, C, Excel, AutoCAD, Hardware (Arduino, ESP32, Modelsim)

Soft Skills

Communication, Teamwork, Time Management, etc.

Projects

Kessler Syndrome 🔗, *Kessler Syndrome Simulator* | Rust, wgpu, WGSLL Developed a real-time 3D simulation of orbital debris collisions and cascading fragmentation using Rust and wgpu. Implemented orbital-body physics, spatial-hash collision detection, debris generation, and interactive camera controls with live telemetry

Neuromorphic Emulator 🔗, ***Neuromorphic Emulator*** | Python, NumPy, PyScript, WebAssembly * Developed a real-time Spiking Neural Network simulator with 150 Leaky Integrate-and-Fire (LIF) neurons and weighted synaptic connections. * Implemented vectorized NumPy-based network computation and browser-based visualization using PyScript, Pyodide, and HTML5 Canvas.

Other projects at my GitHub 🔗

Certificates

- NPTEL- Data Analytics with Python [↗](#)
 - IBM GEN AI Course
- Workshop in RISC V Training conducted by IIT Madras [↗](#)
- NPTEL- Data Structures [↗](#)

Languages

English

Fluent

Tamil

Native/Bilingual

Hindi

Fluent

Japanese

Basic