TANMAY TRIPATHI

Gmail ⋄ LinkedIn ⋄ Website

SUMMARY

Self-driven EEE student at VIT Vellore with experience in C++, embedded systems, and cloud computing. Completed hands-on projects in shell/interpreter development, and have a strong foundation in DSA problem solving skills through leetcode.

EDUCATION

Btech In Electrical and Electronics Engineering, VIT Vellore   2022-2026

Relevant Course Work : Competitive Coding course, Microprocessor, Embedded C, AWS for Cloud Computing, Machine Learning, Artificial Intelligence, DSA

SKILLS

Languages	C/C++, Java, Python, SQL, TypeScript, Javascript
Tools and Platforms	Git, GitHub, Vercel, Linux, MATLAB, SpringBoot,Excel, Python libraries
Frameworks and Libraries	Next.js, React, Tailwind CSS, SpringBoot
Developer Skills	DSA, Shell Scripting, Embedded C, Database

EXPERIENCE

C++ Intern   May 2025 - present
Kineton   *https://kineton.co/*

- Developed C++ software modules for Kineton's AI and semiconductor systems, focusing on the 'Baseplate' as well as 'Fabric' interface engine.
- Collaborated with 3 developers to design modules in C++ for intelligent hardware.

PROJECTS

Build Your Own Shell (code crafters)(02/2025 - 03/2025) Developed a custom Unix-like shell from scratch using C++ in which I implemented core functionalities: command parsing, process handling, I/O redirection. Also, designed a REPL to handle user input with built-in commands (cd, exit, pwd)

Build Your Own Interpreter (code crafters)(04/2025 - present) Have been working on designing an interpreter using parsing techniques and lexical analysis. Also Implementing variable assignments, control structures, and function calls etc

IoT-Based DAC System for Electrical Labs modernising machines lab (07/25 - present) Working on an IOT based system to automate the data logging process for experiments by interfacing an ESP32 with industrial sensors, increasing data accuracy and eliminating the need for manual transcription.

LEADERSHIP & ACTIVITIES

Hack the Dash
Learned and implemented power bi for a data analysis hackathon, and stood as a runner up

Senior Core VIT Music Club
An enthusiastic singer and managed a college band for 2 years

Physical Fitness
Regular training and maintaining active lifestyle