TANMAY TRIPATHI

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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

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

SKILLS

LanguagesC/C++, Java, Python, SQL, JavascriptToolsGit, GitHub, Linux, MATLAB, SpringBootDomainDSA, Shell Scripting, Embedded C, DatabaseSoftwarePower BI, PSpice, Powerworld, Nuvoton, Keil

EXPERIENCE

 $\mathbf{C}++$ 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

(self-motivated code crafters projects)

Build Your Own Shell (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 (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

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