

Deeraj Chowdary

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Experience

Software Developer Intern , PAL-Tek

July 2024 - December 2024

- Partnered with a core development team of 12 members through meetings to advance the language's development.
- Established a content automation system to streamline workflows.
- Designed and developed a comprehensive website for the programming language, enhancing its online presence and user engagement

Education

Manipal University – B.Tech in Computer Science & Engineering (Hons in AI and ML)

October 2021 - July 2025

Projects

Calru - Math Interpreter

- A custom interpreted language supporting a range of arithmetic operations and features. With 5+ advanced mathematical features.
- Architected key interpreter modules, including 95% error coverage, expression evaluation, and a command-line interface (CLI).
- Designed and executed 20+ comprehensive tests to thoroughly validate each phase of the interpreter, ensuring reliable and accurate execution.
- Actively expanding the language to support advanced mathematical operations and complex syntax parsing.

Medicontrol - Medicine Dispenser for the Elderly

- Executed requirement analysis and seamlessly integrated Firebase for real-time data sync between the web app and Raspberry Pi 4.
- Implemented sliding doors powered by SG90 motors and controlled via limit switches for precise operation.
- Created a web application enabling doctors to manage multiple dispensers through a centralized dashboard.
- Integrated a display for user interaction, providing real-time information on medication schedules, dosage, and dispensing status.

Vivi - A zsh-plugin to integrate LLM models into terminal

- Developed a terminal-based plugin leveraging the Gemini API, achieving 95% accuracy in generating and executing shell commands across Zsh and Bash environments, with over 100 commands tested.
- Earned placement in the Awesome-Zsh-Plugins repository, joining a curated list of 300+ high-quality plugins, boosting visibility and adoption.
- Optimized plugin workflows with streamlined installation, update, and uninstall scripts, enhancing accessibility and user satisfaction.

Volunteer Experience

Contributor, Rustfmt (Rust Language Code Formatter)

- Resolved a critical issue in Rustfmt's error messaging by including precise file paths and details, added 2 new tests, and refactored existing tests to resolve conflicts, improving error reporting accuracy.

Skills

Languages : Rust, C++, GFORTH,Python,Javascript,Bash,Golang.

Libraries & Tools : Git , Tensorflow,React.js,Vue.js ,Express.js,Node.js,MongoDB.

Technical Skills : Natural Language Processing , Shell Scripting, Compiler Construction,Cli Tools in Linux , Front End Development, OOPS,algorithms, Computer Networks.