Siddarth Peddi

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PROFESSIONAL SUMMARY

I am a undergraduate student passionate about building great products to improve the lives of others around me through excellent engineering.

EDUCATION

Bachelor of Computer Engineering   **Expected Graduation 2026**
Rose-Hulman Institute of Technology
- Coursework: Object-Oriented Software Development, Data Structure & Algorithms, Combinatorics, Embedded systems, and Operating Systems

SKILLS

Programming Languages
- Python, Java, JavaScript/TypeScript, C/C++, MATLAB, HTML/CSS

Technologies / Frameworks
- React, Git, Node.js, Playwright, Selenium, Ghidra, WireShark, MSP430, Puppeteer, SQLite3, GraphQL, Microsoft Office Suite, Google Suite, MongoDB, AWS, Next.js, React.js, Express.js

WORK EXPERIENCE

Software Engineering Intern, Aumtech   **May 2023 - Aug 2023**
- Implemented a program that automatically converted all recorded customer calls to be converted from .mp3 to .wav which resulted in 50% reduction in time required converting audio files.
- Designed a FastAPI for the CV algorithm, to implement error-checking, improving overall efficiency by 15%.

Electrical Engineering Intern, Rose Hulman Ventures   **Jan 2023 - May 2023**
- Designed a LED panel and driver board using OrCad Cadence for a museum exhibit that saved the organization $5,000.

Consulting Intern, Bizwise Group   **Sep 2021 - May 2022**
- Created framework for privacy and data for client organizations and client experience roadmaps which allowed for more efficient transitions between positions and reduced training costs by 2%.

PROJECTS

Password Authenticator
- Developed a multi-threaded GUI suite using Java and JavaFX to store user credentials by implementing encryption techniques like hashing to prioritize robust security and user privacy.
- Integrated 2 Factor Authentication and Selenium Automation to reinforce the security of the application and streamline website access, substantially elevating user convenience without compromising security.

Weather App
- Developed a full-stack Mern Weather app with Next.js for frontend and MongoDB as database.
- Configured Server Side Rendering for a custom Filter Page, optimizing search API calls.
- Utilized Docker for code deployment, enhancing scalability.

Rubik's Cube Solver
- Implemented an optimized variant of Kociemba's two-phase algorithm, allowing the program to solve a Rubik's Cube within 50-moves as well as being accessible through a web browser.
- Create a graphical representation of the Rubik's Cube that dynamically updates as the solver progresses through the solution.

Machine Learning & Computer Vision Image Identifier
- Defined machine learning model through the use of Tensor Flow
- Incorporated the trained model into an iOS app, allowing users to identify objects in their photo library/camera