Mikias Tadele

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SKILLS

Frontend: JavaScript | TypeScript | React.js | Swift | Three.js | Bootstrap | Tailwind CSS | HTML | CSS | antd

Backend: Python | Java | C++ | R | MySQL | Node.js | Express.js | Firebase

Other: Git | Machine Learning | Robotics | Computer Vision | Blender | Unity | Jira | Confluence

EXPERIENCE

MyRaina, West Chester, PA   January 2025 - Present
Software Engineering Intern

- Developed machine learning algorithms to track and analyze assistive device usage, aiming to prevent elder care falls.
- Built data pipelines for preprocessing and augmenting assistive device images, optimizing model accuracy.
- Created synthetic image generation software to diversify datasets and minimize overfitting.
- Developed a React component with custom hooks and API integration to display assistive device misuse results and inform caregivers.

Communications Test Design Inc. (CTDI), West Chester, PA   May 2024 - August 2024
Software Engineering Intern

- Automated Amazon product testing using a robotic arm, reducing testing time by 45% and earning recognition from the CEO for improving efficiency.
- Designed and implemented a motion recording and playback mechanism for robotic arms, reducing development times.
- Leveraged computer vision to enhance the precision of robotic arm movements, optimizing accuracy in testing workflows.

PROJECTS

Ride Sharing App
- Collaborated with a team to develop a ride-sharing app for college students, addressing transportation challenges.
- Built core features using Swift and SwiftUI, integrating Firebase for backend services such as authentication, real-time data storage, and user management.
- Project gained recognition from the Augustana University president, with plans for pilot testing among students and potential expansion to other colleges.

Augustana University Voting Platform
- Developed a full-stack voting platform using React and Node.js to replace Augustana's outdated system, improving reliability, security, and user experience for 2,000+ students during campus elections.
- Implemented secure student authentication, anonymous encrypted voting, and real-time ballot processing.
- Collaborated with a team to deliver the project, earning $2,500 for our work.

Solar Eclipse Simulation Software
- Built an interactive solar eclipse simulation tool for Augustana's Astronomy class, enabling students to calculate eclipse paths, timings, and visualizations for use in coursework and assignments.
- Implemented the project in pure vanilla JavaScript with reusable, modular components inspired by React, optimizing the codebase for scalability and long-term maintainability without external dependencies.
- Collaborated on improving existing astronomy class simulation software by refactoring code, creating reusable components, and enhancing overall performance and stability.

EDUCATION

Augustana University, Sioux Falls, SD
Bachelors in Computer Science and Software Engineering, Expected 2026, GPA: 3.6
Relevant Coursework: Data Structure and Algorithm, Software Engineering, OOP, Machine Learning and AI, Database Management, Data Science, Website Development, Probability and Statistics , Discrete Math, Calculus