Pranav Kodakara

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Education

University of Michigan Engineering, Ann Arbor, MI **May 2025 (expected)**
BSE — Computer Science with Minor in Mathematics, GPA 3.86/4.0

- Coursework: Data Structures and Algorithms, Database Management, Cybersecurity, Web Systems, Artificial Intelligence, Computer Organization, Computer Science Theory, Discrete Math, Linear Algebra, Probability

Trumbull High School, Trumbull, CT, *Class Valedictorian* **Jun 2022**

Technical Skills

Languages/Frameworks: Java, Spring Boot, C++, C, Python, Flask, Swift, HTML/CSS, JavaScript, React, SQL, R
Tools: Git, Splunk, Docker, Postman, Jenkins, Pivotal Cloud Foundry, Figma, VS Code, IntelliJ

Experience

Synchrony Financial, Stamford, CT **May 2024 - Present**
Software Engineer Intern, API Engineering

- Enhancing the new bank account opening platform to simplify, accelerate, and reduce the cost of identity-related procedures, such as authentication, authorization, and fraud prevention, leveraging Spring Boot and Gradle to ensure seamless integration and optimal performance.
- Developing an API endpoint to consolidate and display transfer transaction limits for customer groups, facilitating error prevention by ensuring users are informed of applicable limits.
- Supporting the User Acceptance Testing (UAT) environment by monitoring and troubleshooting errors through Splunk logs, ensuring smooth testing processes.

Eversource Energy, Newtown, CT **Jun 2023 - Aug 2023**
Distribution Engineer Intern

- Improved the electrical distribution system across western Connecticut, expanding infrastructure for greater reliability and responsiveness through routine and special projects.
- Delivered 100+ recommendations on equipment replacements and repairs to maximize return on assets after reviewing interruption reports and analyzing circuit deficiencies (e.g. voltages, overloads, etc).
- Devised a comprehensive $2.3 million plan for a sectionalizing and reconductoring project, strategically targeting circuit reliability in a hospital vicinity to bolster system performance and proactively prevent future outages.

Projects

Client-Side Dynamic Instagram Clone, JavaScript, React, Python, Flask, SQL, HTML/CSS, AWS

- Engineered an Instagram application replica using Flask to construct a secure and scalable RESTful API, leveraging SQL for a relational database storing user data, posts, comments, and likes with deployment to AWS cloud.
- Integrated user authentication with HTTP basic authentication within the Flask API and built a client-side dynamic React/JS frontend featuring infinite scrolling and real-time post interaction updates.

Forum Post Classifier, C++

- Leveraged machine learning techniques of conditional probability optimization to develop a text classification system, utilizing prior Piazza posts for training to determine the subject of new forum posts.
- Implemented data structures, including binary search trees and maps, optimizing them for efficient storage and element retrieval.

Activities

Tau Epsilon Kappa Professional Technology Organization **Jan 2023 - Present**
Vice President of Professional Development, Academic Chair

- Lead the Professional Development committee, managing 15 members to coordinate professional development workshops, guest speakers, philanthropy events, and DEI panels to educate 70+ members.
- Organized and led a hackathon/design jam for 100+ students, overseeing event planning and judging.

Michigan Hackers **Jan 2023 - Present**
Machine Learning Team

- Developed a personalized music recommendation project utilizing the Spotify Web API to analyze user-inputted songs, implementing machine learning algorithms to enhance the accuracy of music recommendations.