Aaryan Patel

(650)-273-6642 | aaryanp802@gmail.com | linkedin.com/in/aaryan–patel | github.com/aaryanpatel2 | aaryanpatel2.github.io

Education

University of Wisconsin-Madison Madison, Wisconsin

B.S. Computer Science and Data Science — Minor in Entrepreneurship and Game Design *Expected May 2027*

Relevant Coursework: Data Structures, Algorithms, Object-Oriented Programming, Machine Learning for Engineering Research, Geographic Information Systems

Skills

Languages: Java, Python, R, JavaScript, TypeScript, HTML, CSS, Bash, SQL, English, Gujarati

Tools: React, AWS, Git, Terraform, Node.js, Express.js, Docker, MongoDB, Pandas, Figma, Jira

Experience

Software Engineer Intern May 2025 – August 2025

State Farm *Bloomington, IL*

- Architected an internal tool featuring an embedded AI chatbot with a user-friendly **React** interface, utilizing **Terraform** for scalable infrastructure
- Engineered and optimized efficient **Python**-based **REST** APIs within the **AWS** ecosystem, delivering solutions following **Agile** methodologies
- Accelerated workflow by implementing a **CI/CD** pipeline, enforcing code quality through high-coverage unit testing with **Jest** and **Pytest**

Research Computing Facilitator Assistant July 2024 – Present

University of Wisconsin-Madison Center of High Throughput Computing *Madison, WI*

- Streamlined data management for research computing by writing scripts that automate data collection and report generation using **Python**, **Pandas**, and **Bash**
- Generated insightful reports and tables from key metrics using **R** and **Matplotlib**, facilitating analysis of high throughput computing usage
- Refactored existing data collection and report generation processes, optimizing workflow efficiency and reducing manual effort for researchers by creating software recipes in **Docker**

Computer Hardware Engineer May 2024 – August 2024

NASA *Remote*

- Spearheaded the design, selection, and integration of the Command and Data Handling (CDH) subsystem of a conceptual lunar rover mission in a student-led team of **10+** students
- Delivered technical guidance, trade studies, and support to the subteams as the primary computer hardware engineer, ensuring hardware compatibility and adherence to project constraints

Projects

Datamatch

- Attracted over **32,500+** annual users by significantly boosting user engagement through a comprehensive website redesign and requested feature implementation using **React**, **HTML**, and **CSS**
- Collaborated in cross-functional communication between divergent college web teams to seamlessly integrate front-end components using **Figma**

FragranceAI

- Designed a robust data pipeline for **50,000+** fragrance entries, leveraging advanced text feature engineering and efficient batch processing of embeddings to build a high-performance **ChromaDB** vector store for semantic search
- Developed a scalable microservice architecture for AI powered APIs using **FastAPI**, incorporating **Retrieval-Augmented Generation**

Leadership

Chief Code Executive May 2024 – Present

Datamatch *Madison, WI*

- Cultivated a high-performing code team through effective code reviews, mentorship, and troubleshooting
- Orchestrated a coding boot camp, educating **10+** students on **React**, **Firebase**, **HTML**, and **CSS** fundamentals