

# JAY PATEL

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## EDUCATION

University of Virginia, Charlottesville, VA

August 2020 - May 2025

**Bachelors in Computer Science & Biology** (Computer Science GPA: 3.9)

Activities: Echols Scholars (top 5% of incoming class), UVA Awaaz Club (Cofounder), Queer Student Union, Intramural Soccer

## SKILLS

- Programming Languages: Python, Java, C/C++, C#, JavaScript, TypeScript, x86 Assembly
- Web Development: HTML, CSS, React, Node JS, Express JS, Selenium, Git, Agile
- Cloud/Databases: Azure, Firebase, AWS, MongoDB, SQL, PostgreSQL

## EXPERIENCE

Neighborhood Studios, Atlanta, GA

Software Development Intern

November 2023 - January 2024

- Implemented a full-stack feature (React, Express.js, AWS) that enabled paid services and successfully monetized one of the incubator's startups.
- Built an LLM-based competitor analysis tool to analyze market tweets, driving product development across incubator.
- Developed a document processing pipeline using LangChain, HuggingFace, and MongoDB Atlas for tokenizing, embedding, and storing tweets/PDFs, improving context-aware QA.
- Leveraged AI/ML techniques (Reinforcement Learning, RAG algorithms), boosting LLM prompts accuracy for competitive insights.

Warburg Pincus LLC, New York, NY

Software Engineer Intern

June 2023 - August 2023

- Revamped key financial visualizations for a \$109B internal portfolio management app, increasing user understanding and speeding up crucial user journeys by 10%.
- Reduced React codebase by 1% through refactoring and optimizations, reducing maintenance costs for FTEs.
- Resolved critical bugs with scalable TypeScript/C# solutions, improving site reliability for 5,000+ global users.
- Quickly mastered in-house frameworks and Azure tools to collaborate with an 8-person agile team.

## PROJECTS

Educator Hub - React.js/Firebase Dashboard for School Administrators

Summer 2023

- Created a dashboard for school data management, with creation, retrieval, updates, and deletion (CRUD) functionality.
- Designed user-centered and accessible UX with enrollment, grading, and authentication features.

Socket Chat - Real-Time Messaging Application in C

Spring 2023

- Built a command-line chat application using TCP/IP client-server architecture for low-latency communication.
- Implemented robust network I/O handling using sockets, system calls, and polling, while ensuring security through error handling and buffer overflow prevention.

Astral Projector - Python-Based Star and Galaxy Classification Tool

Fall 2022

- Wrangled, visualized, and analyzed a multidimensional dataset to uncover key trends.
- Achieved 95% prediction accuracy by training a neural network and fine-tuning hyperparameters.

Meme Magic - Java Memes Generator with User Feed

Spring 2021

- Developed a Java Meme generator from scratch with custom GUI and full coverage JUnit Testing with 100+ tests.
- Created a customizable feed allowing users to upload images, rate memes, and sort content based on rating.

## VOLUNTEERING

Emergency Medical Technician (EMT)

May 2021 - February 2024

- Triageed and coordinated treatment for 200+ patients in collaboration with police and emergency response teams