

JAY PATEL

Workright: US Citizen (By Birth)

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EDUCATION

University of Virginia, Charlottesville, VA

August 2020 - May 2025

Bachelors in Computer Science & Biology (Computer Science GPA: 3.92)

Activities: Echols Scholar (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 / Machine Learning: Azure, Firebase, AWS, MongoDB, SQL, PostgreSQL, LangChain, Splunk

EXPERIENCE

UKG - Workforce & Payroll Software, Atlanta, GA

Incoming Software Engineering Intern

September 2024 - December 2024

- Assigned to expand Kotlin-based SaaS functionality in flagship Payroll Application serving 14,000+ corporate clients.

Freddie Mac - Fortune50 Mortgage Corporation, McLean, VA

Computer Science and Machine Learning Intern

May 2024 - August 2024

- Automated 5+ critical cross-team processes with Python, reducing workload for 30+ cybersecurity FTEs.
- Enhanced pattern recognition and anomaly detection to safeguard 200+ endpoints, including company-wide emails.
- Engineered an ML-powered data exfiltration algorithm to classify sensitive data types and detect unauthorized outbound data transfers with 80% accuracy.

Neighborhood Studios - Startup Incubator, Atlanta, GA

Software Developer Intern

November 2023 - January 2024

- Implemented a full-stack feature (React, Express.js, AWS) to enable paid services and monetize an in-house startup.
- Built an LLM-based tool to analyze competitor tweets, informing data-driven product development and strategy.
- Leveraged AI/ML techniques (Reinforcement Learning, RAG algorithms) and boosted LLM prompts accuracy by 50%.
- Developed a document processing pipeline using LangChain, HuggingFace, and MongoDB Atlas for tokenizing, embedding, and storing tweets/PDFs to improve context-aware QA.

Warburg Pincus - Private Equity Firm, New York, NY

Software Engineer Intern

June 2023 - August 2023

- Revamped key financial visualizations in \$109B portfolio management UI, speeding up crucial user journeys.
- 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.

PROJECTS

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

Summer 2023

- Created a full-stack application with CRUD functionality and 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 with buffer overflow prevention.

Astral Projector - Python-Based Star and Galaxy Classification Tool

Fall 2022

- Wrangled and analyzed a multidimensional dataset for neural network training achieving 95% prediction accuracy.

VOLUNTEERING

Emergency Medical Technician (EMT)

May 2021 - February 2024

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