Jackson Belanger

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EDUCATION

Georgia Institute of Technology

Atlanta, GA

Bachelor of Science in Computer Science | GPA: 3.96

Expected May 2027

Coursework: Computer Architecture, Networking & Processors, Artificial Intelligence, Data Structures & Algorithms

WORK EXPERIENCE

Software Engineer Intern

May 2025 - Aug 2025

Roblox

San Mateo, CA

- Developed a custom Kubernetes controller using Go that orchestrates percentage-based rollouts for service deployments.
- Implemented an in-memory expectations store to verify desired state against live cluster state, enforcing cache consistency.
- Built out CLI tool that allows ~2,000 engineers to securely deploy new service versions to company-owned data centers.

Software Engineer Intern

June 2024 - Aug 2024

Fidelity Investments

- Engineered key features for Fidelity's career portal for applicants and recruiters using Java, Postgres, Angular, and Spring.
- Reduced load times by 40% by implementing caching with Redis, optimizing GraphQL queries, and improving server logic.
- Wrote Python scripts to automate recruiter workflows and candidate tracking, saving recruiters around 5 hours per week.

Software Developer Intern

May 2023 - May 2024

Tree-Plenish

Remote

- Developed a full-stack Flask web application, enabling rules-based app notifications and automated order tracking emails.
- Improved retention rate by 20% by analyzing the factors predictive of a client returning using Python, Pandas, and NumPy.

Software Developer Intern

June 2023 - Aug 2023

Indigo Slate Seattle, WA

Developed a project management dashboard for 150 employees with React, ensuring confidentiality by allowing workers to view only their assigned projects. Enhanced security and login flow by implementing Microsoft SSO for identity verification.

PROJECTS

Windows Virtualization Platform | C++, KVM, QEMU, libvirt, Linux, SPICE

Engineered a virtualized Windows environment management system, featuring dynamic VM provisioning, persistent memory state with disk backing, and low-latency display streaming via SPICE. Allows users to use Windows through a web browser.

Five-Stage Pipelined RISC CPU | CircuitSim, Assembly, Digital Logic, Processor Design, Hazard Resolution

Implemented a five-stage pipelined RISC CPU in CircuitSim, cutting execution latency through parallelization, a custom forwarding unit, and single-bubble load hazard resolution. Achieved a 4.6x latency cut over non-pipelined baseline.

Competitive Stock Trading Platform | React Native, JavaScript, TypeScript, Redux, Express.js, Node.js, MongoDB

Built a highly engaging head-to-head stock trading platform. Implemented REST APIs and WebSockets for real-time data synchronization. Optimized system performance with efficient caching, data streaming, matchmaking, and trade processing.

ACTIVITIES & AWARDS

Quant Trading Analyst

Jan 2024 – Dec 2024

Trading Club @ Georgia Tech

- Model sector ETFs' volatility surfaces based on the volatilities of the largest components with principal component analysis.
- Completed an intensive quantitative finance bootcamp covering options theory (Black-Scholes, Greeks), stat arb, and more.

3rd Place in Harvard Trading Competition

March 2024

Harvard Undergraduate Quantitative Traders

Competed in ranked games testing skills in market making, betting, mental math, and making decisions under uncertainty.

TECHNICAL SKILLS

Languages: C++, Python, C, Java, JavaScript, Go, Swift, TypeScript, HTML/CSS, SQL, GraphQL

Frameworks and Libraries: React, Angular, Node.js, Express.js, Spring Boot, Flask, React Native, Redux, Pandas, Redis Developer Tools: Git, GitHub, Kubernetes, MongoDB, PostgreSQL, AWS, Docker, Firebase, Postman, Jenkins, Gradle Concepts: Operating Systems, Optimization, Debugging, Unit Testing, Databases, Cloud Computing, Version Control, Agile