



EDUCATION:

Bachelor of Science in Computer Science and Mathematics (Data and Statistics)

May 2026 - 3.7/4.0

University of Massachusetts Amherst: Manning College of Information and Computer Sciences

Relevant Coursework: Data Structures, Algorithms, Object-Oriented Programming, Software Development, Artificial Intelligence,

Programming Methodologies, Fundamentals of Programming, Calculus, Operating Systems, Linear algebra, Statistics

Extracurriculars: CodePath Interview Prep Course, Rewriting the Code (RTC), Society of Women Engineers (SWE)

SKILLS AND CERTIFICATES:

 $\textbf{Languages:} \ Python, C++, SQL, Java, C, Typescript, Javascript, CSS, HTML, Swift, P\ Language$

Tools and Libraries: React.js, Node.js, PyTorch, Pandas, NumPy, Matplotlib, Jupyter Notebooks, Github/Git, OpenTelemetry, Spring

Boot, OpenSearch, Grafana, Gradle, Docker, AWS, Jenkins, Google Cloud Platform, MongoDB, Arduino and VSCode

Certificates: AWS Certified Cloud Practitioner, Querying Data from PostgreSQL, Machine Learning & GCP, Using Machine Learning in Trading and Finance, Version Control and Git, Introduction to iOS Mobile Application Development

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EXPERIENCE:

Software Engineer Intern at American Express

Phoenix, AZ

June 2025 - August 2025

- **Designed**, implemented, and pushed to production a data instrumentation **pipeline** integrating **OpenTelemetry** and Micrometer into an internal **API**, exporting **119** unique metrics to ELF tracing and **OpenSearch** for real-time visibility across **10+ teams** via centralized Grafana dashboards.
- Monitored and aggregated 7K+ daily performance data points, applying transformations and trend
 analysis to deliver actionable insights that reduced downtime incidents and improved transparency
 across business units.
- Built and **optimized** Lucene queries to manipulate **100M+ records**, enabling faster, **data-driven decisions** and enhancing cross-team collaboration.
- Won **1st place** regionally and **3rd place nationally** in the Global Intern Hackathon by developing a Slack bot to answer questions, scrape documentation, and connect employees to domain experts.

Software Engineer Intern at Fidelity Investments

Merrimack, NH

June 2024 - August 2024

- **Collaborated** with a team of 6 software engineers to develop an internal health status page, monitoring the health of business units and their products in order to reduce downtime to over 100 employees.
- Utilized **AWS**, **Docker**, **Jenkins**, and **PHP** to create a robust platform that expedited issue resolution and minimized downtime.
- Improved inter-departmental collaboration and operational responsiveness to over 7 teams.

Undergraduate Course Assistant at UMass Amherst

Assisted and supported over 35 students in mastering **Object-Oriented Programming** using **Java** and **Python**, ensuring a deep understanding of key concepts.

Provided one-on-one tutoring to over 30 students, significantly improving their coding skills and academic performance by breaking down complex programming topics into manageable segments.

September 2024 - Present

academic performance by breaking down complex prograi

Student Ambassador at UMass Amherst
 Served as an outstanding student leader at UMass Amherst, representing Manning College, exemplifying academic excellence and inspiring both prospective and current students.

March 2023 - Present

SIDE PROJECTS:

Momentum Trading Algorithm (Python, NumPy, Pandas, Matplotlib)

March 2024 - July 2024

Developed a Python-based trading algorithm designed for the **SOXL ETF**, using key technical indicators like Stochastic RSI, RSI, EMA, and ATR to determine optimal buy and sell points. It includes **backtesting** functionality, which showed impressive results over 719 days achieving a total return of **154.96%** and average annual return **(CAGR)** of **60.87%**. This algorithm significantly outperformed the QQQ benchmark (CAGR: 21.6%) by approximately **3x**.

Codestrike Leetcode Game (Javascript, HTML, CSS, React.js, Node.js)

Collaborated with a team of 6 to develop a 1 vs. 1 competitive coding game that makes practicing algorithms engaging and fun. Served as a **full-stack developer** to engineer the backend using **JavaScript** and **API integrations**, implemented real-time gameplay with **Socket.io**, and managed the design and development of the frontend.

November 2024 - December 2024