STONE LIU

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EDUCATION

Northeastern University

Boston, Massachusetts

Candidate for Honors Bachelor of Science in Computer Science and Mathematics

Expected May 2026

• **GPA:** 3.78 / 4.00

TECHNICAL SKILLS

Languages: TypeScript/JavaScript, Go, Python, Java, C++, C

Technologies/Frameworks: Vim, Docker, Git, React.js, Vue.js Apache Spark & Maven, AWS S3 & Lambda

EXPERIENCE

Chief Software Engineer

June 2025 - Present

Generate Product Development Studio

Boston, MA

• Built a distributed, containerized test oracle using **Go** and **PostgreSQL**, facilitating the autograding of technical challenges for over **100+** prospective software engineers.

Software Engineer Co-Op

January 2025 - June 2025

Morse Corporation

Cambridge, MA

- Implemented a F-score based tracking metric for object detection models in C++, giving stakeholders faster insights into model performance.
- Designed a scalable test harness with **Apache Spark**, supporting parallel data processing on **100 million+ metrics**, increasing pipeline reliability.
- Deployed containerized model runners and inference processing pipelines using **OpenCV** and **Polars**, accelerating metric turnaround time by over **50**%.

Technical Lead

September 2024 – April 2025

Generate Product Development Studio

Boston, MA

- Led a team of 7 software engineers, designing containerized **RESTful** web server applications through the **OpenAPI** specification.
- Implemented a web server that supported multimedia compressing/serving through AWS S3 and scheduled push notifications using AWS Lambda.
- Enabled real-time notification services through **Supabase** database subscribers and designed type-safe database transactions using **Drizzle-ORM**.

Software Engineer Co-Op

January 2024 - August 2024

Spill Center

Hudson, MA

- Designed a web application for cargo tank owners using **Nuxt.js** and **MongoDB**, enabling customers to view detailed reports on **800,000**+ cargo tanks.
- Created reusuable dashboard components written in Vue.js, allowing 3000+ contractors access to detailed spill
 incident reports.
- Monitored 10,000+ incidents within alert groups by implementing a geospatial alert service through PostGIS spatial queries.

PROJECTS

Dearly | TypeScript, React-Native, Docker, AWS S3/Lambda, PostgreSQL

- Dearly is a private family-sharing app bridging generational gaps and makes staying connected easier and more meaningful.
- Deployed CI/CD pipelines through **Github Actions**, automating over **500**+ integration tests written with **Jest** and containerized deployments using **Docker**.
- Cached API requests using **TanStack-Query** and compressed image/audio content through **Sharp.js**, leading to an **80**% decrease in API calls and **50**% faster loading times.

Bazaar | Java, Apache Maven, Bash, Google Gson

- Created a distributed trading card game using Apache Maven, where player mechanisms connect over TCP/IP sockets.
- Developed a backtracking algorithm that efficiently searched through millions of candidates using DFS and data accumulators.