

# STONE LIU

617-792-6757 | qwantumstone{at}gmail{dot}com | linkedin/stone-liu | github.com/stoneliuCS

## EDUCATION

### Northeastern University

Candidate for Honors Bachelor of Science in Computer Science and Mathematics

Boston, Massachusetts

Expected May 2026

- **GPA:** 3.78 / 4.00
- **Awards:** Northeastern Honors Program, Deans List

## TECHNICAL SKILLS

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

**Technologies:** Nvim/Vim, Docker, Git, GDB & LLDB, AWS S3 & Lambda

**Frameworks/Libraries:** React.js, React-Native, Apache Spark & Maven, Vue.js

## 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 reusable 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.
- Designed **PostgreSQL** database schema to model one to many, many to one, and many to many business entities for users, groups, posts, and notifications.