# 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:** 3.79 / 4.00

• Awards: Northeastern Honors Program, Deans List

#### Technical Skills

 ${\bf Languages: \ TypeScript/JavaScript, \ Python, \ Java, \ C, \ C++, \ SQL, \ Bash}$ 

Technologies: Nvim/Vim, Docker, Git, AWS S3 & Lambda, Nix

Frameworks/Libraries: Pyspark, Pandas, Polars, React.js, React-Native, Next.js, Vue.js, Nuxt.js

#### EXPERIENCE

# Software Engineer Co-Op

 $January\ 2025-Present$ 

Morse Corporation

Cambridge, MA

- Built core infrastructure for data analysis pipelines aimed at algorithmic testing and evaluation of object detection models.
- Designed a scalable test harness using Apache Spark, supporting parallel data processing on 100 million+ metrics giving team members insights into model performance.
- Deployed model runners and inference processing pipelines with **OpenCV**, automating metrics for multiple vendors and reducing metric turnaround time by over **50**%.

#### Technical Lead

September 2024 – April 2025

Generate Product Development Studio

Boston, MA

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

#### Lead Lab TA – Fundamentals of Computer Science I

September 2024 – December 2024

Khoury College

Boston, MA

 Helped 600+ introductory computer-science students by teaching systematic program design with topics including structural recursion and accumulators using Racket ISL.

# Software Engineer Co-Op

January 2024 – August 2024

Spill Center

Hudson, MA

• Created a centralized web application for cargo tank owners and operators using **Nuxt.js**, enabling customers to view detailed reports on over **800,000+** cargo tanks.

#### 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 using **Github Actions**, automating over **500+** integration tests written using **Jest** and containerized deployments through **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.

## Fluid-OAS | TypeScript

- Fluid-OAS is a declarative domain specific language expressing type-safe HTTP APIs through the OpenAPI specification.
- Created a fluent, object-oriented interface allowing developers to repeatedly chain together methods, enabling for more maintainable API specifications.
- Maintained backwards compatibility between all OpenAPIv3 specifications through interface segregation, providing support for more than 1800 developers on npm.