

# Sebastian Tremblay

[tremblay.se@northeastern.edu](mailto:tremblay.se@northeastern.edu) | [Personal Website](#) | [GitHub](#) | [LinkedIn](#)

## EDUCATION

### Northeastern University

Boston, MA

*Candidate for B.S. in Computer Science, Minor in Mathematics*

September 2021 – May 2025

**Achievements:** 3.99/4.00 GPA, Huntington 100 Scholar, Dean's Scholarship, Dean's List Award (×5)

**Coursework:** Algorithms & Data Structures, Object Oriented Design, Database Design, Networking & Distributed Systems, NLP, Machine Learning I/II, Multivariable Calculus, Probability & Statistics, Linear Algebra

## TECHNICAL SKILLS

**Languages:** Java, Python, C#, SQL, TypeScript, JavaScript

**Technologies & Tools:** Spring, MySQL, PostgreSQL, Angular, React, Pandas, NumPy, Kafka, Terraform, Docker, Kubernetes, Unix, Linux

**Certifications:** AWS Cloud Practitioner

## WORK EXPERIENCE

### Software Engineer Co-Op — Northeastern University, *Boston, MA*

September 2024 – Present

- Developed full-stack grading platform extension for GitHub (TypeScript, React, Go Fiber, PostgreSQL) to serve as default grading tool for all CS/DS classes. Released beta version to 4 courses, serving 700+ students and 40+ graders
- Managed team of five co-op developers, serving as primary liaison between university stakeholders and development team. Oversaw all project planning through Agile ceremonies and hosted individual performance reviews
- Provisioned scalable and highly-available AWS cloud architecture with Terraform. Deployed Dockerized backend on ECS with Fargate and frontend on S3/CloudFront, utilizing load balancers and elasticity to achieve 99.99% uptime

### Software Engineer Intern — Salesforce, *San Francisco, CA*

May 2024 – August 2024

- Launched Admin Console UI for Intelligent Document Processing (IDP) tool, delivering 12 features to 40 DAU with AngularJS and Bootstrap. Reduced average troubleshooting time 30% by replacing previous terminal-based solution
- Constructed 8 routes for Spring Boot/WebFlux API to support debugging functionality offered in IDP Admin Console
- Researched impacts of LLM Gateway integration with Kubernetes/Splunk, enabling expansion of supported models
- Eliminated 80% of manual validation in human review tasks by refactoring scope of extraction criteria enforcement
- Orchestrated VTO event with 30+ employees, recruiting external charity speaker and leading hands-on team activity

### Software Engineer Co-Op — Insulet Corporation, *Acton, MA*

July 2023 – December 2023

- Initiated team's transition to automated API testing, demonstrating POC by automating 42 manual tests with Python. Slashed release cycle duration 80% by introducing ReadyAPI to minimize human interaction during integration testing
- Scaled batch capacity 500% in quality assurance tool by automating hardware connectivity testing with C#/MySQL
- Introduced app workflow encapsulation using publisher-subscriber design, enhancing GUI with 3 live status indicators
- Refactored hardware interaction layer with template method pattern, maximizing modularity across 14 response classes

### Software Engineer Intern — Ultimate Kronos Group (UKG), *Virtual*

May 2022 – December 2022

- Earned Employee of Month and job extension offer for resolving fatal system crash from external dependency failures
- Diagnosed and resolved 31 software bugs by interfacing with clients, implementing fixes using C#/Angular/MySQL
- Built app in internal hackathon to automate local environment setup, reducing average onboarding time by 2 days

## PROJECTS

### Raft Protocol | *Python*

April 2024

- Implemented Raft consensus protocol to tolerate multi-node failures and message loss in distributed key-value datastore
- Achieved 99.8% consensus success rate in simulated network, ensuring zero packet duplication and minimal redirects

### Facial Detection Attendance Tracker | *Python, GCP, Azure, OpenCV*

January 2024

- Leveraged GCP Video Intelligence to detect segments in surveillance footage with faces. Extracted frames via OpenCV
- Trained custom facial recognition model with Azure Face API to classify extracted images, achieving 0.913 AUC-ROC

## ACTIVITIES & INTERESTS

**Activities:** Fundraiser Coordinator (Raised \$40,000 for *Breakthrough T1D*), Undergraduate Career Mentor

**Interests:** Electric Longboarding, Teaching, Traveling, Mechanical Keyboards