

Sebastian Tremblay

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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

Frameworks & Libraries: Spring, Angular, React, Pandas, NumPy, Kafka, PyTorch

Tools: PostgreSQL, MySQL, Redis, Terraform, Docker, Kubernetes, Kafka

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