Sebastian Tremblay

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 (×6)

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, Kafka, Terraform, Git, 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 80 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

High-Performance Data Pipeline | Python, PyTorch, Kafka, PySpark, MariaDB

June 2024

- Engineered data pipeline with 3 web scrapers and 2 Finance APIs, extracting and calculating 20+ financial metrics
- Optimized processing latency and scalability in distributed data streams by integrating Kafka and PySpark

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