

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: Networking & Distributed Systems, Algorithms & Data Structures, Object Oriented Design, Database Design, Machine Learning I/II, Multivariable Calculus, Stochastic Modeling I/II, Linear Algebra

TECHNICAL SKILLS

Languages: Java, Python, C#, TypeScript, JavaScript, SQL, C
Frameworks & Libraries: Spring, Angular, React, Pandas, NumPy, Flask, Scikit-Learn
Tools: PostgreSQL, MySQL, Redis, Docker, Kubernetes, Terraform, Kafka
Certifications: AWS Cloud Practitioner

WORK EXPERIENCE

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

September 2024 – Present

- Designed and launched full-stack grading extension for GitHub (*TypeScript, React, Go Fiber, PostgreSQL*) to replace university's grading tool for CS/DS classes. Released beta version to 4 courses, serving 700+ students and 40+ graders
- Managed team of five co-op developers, acting as primary liaison between university stakeholders and development team. Led all scoping and project planning with Agile ceremonies, incorporating individualized check-ins and feedback
- Engineered cost-effective AWS architecture, reducing OPEX 17% while maintaining 99.99% uptime. Automated resource provisioning with Terraform, deploying Dockerized backend on AWS ECS with Fargate and frontend on S3/CloudFront

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 WAU 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 40+ attendees, recruiting external charity speaker and leading hands-on team activity

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

July 2023 – December 2023

- Developed tool to automate hardware connectivity testing (*C#, MySQL*), scaling quality assurance throughput 230%
- Pioneered transition to automated API testing, showcasing POC by converting 42 manual tests into Python scripts. Slashed release cycle duration 80% by leading ReadyAPI integration to reduce manual efforts in integration testing
- 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 with *C#, Angular, and MySQL*
- Developed application in internal hackathon to automate local environment setup for new hires (*Python/Bash Scripts*), reducing average onboarding time by 2 days. Won "Fan's Favorite" award and deployed solution to over 300 engineers

PROJECTS

Raft Consensus Protocol | *Python*

April 2024

- Designed and implemented Raft consensus protocol to promote fault-tolerance and consistency in distributed datastore
- Achieved 99.92% request success in simulations of 30% packet loss, concurrent partitions, and consecutive leader failure

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: Automation, Electric Longboarding, Teaching, Traveling, Mechanical Keyboards