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, Go, C

Frameworks & Libraries: Spring, Angular, React, Pandas

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

Certifications: AWS Cloud Practitioner

Work Experience

Software Engineer Co-Op — Northeastern University, *Boston, MA* September 2024 – December 2024

- Built and launched full-stack grading extension for GitHub (*TypeScript, React, Go Fiber, PostgreSQL*) to replace legacy grading tool for programming courses. Conducted market outreach to release beta version to intro courses
- Managed team of five co-op developers, leading development efforts through Agile ceremonies, personalized check-ins, and code reviews. Partnered with university stakeholders to define product requirements, scope, and release timeline
- Designed resilient AWS architecture, achieving 99.99% uptime through auto-scaling policies, automatic failover, and load balancing. Provisioned resources with Terraform, deploying Dockerized microservices on AWS ECS with Fargate
- Amplified system scalability by integrating Redis for caching/session management, slashing GitHub API queries 30%

Software Engineer Intern — Salesforce, *San Francisco, CA* May 2024 – August 2024

- Launched Admin Console UI for Intelligent Document Processing (IDP) tool, releasing 12 monitoring features to 40 WAU (*AngularJS, Bootstrap*). Reduced average troubleshooting time 30% by replacing legacy terminal solution
- Constructed 8 routes for Spring Boot/WebFlux API to support debugging functionality offered in IDP Admin Console
- Analyzed impacts of LLM Gateway integration using 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 Tools Co-Op — Insulet Corporation, *Acton, MA* July 2023 – December 2023

- Developed quality assurance tool to automate insulin pump connectivity and responsiveness testing (*C#, MySQL*)
- Pioneered transition to automated API testing, showcasing POC by converting 42 manual tests into Python scripts. Slashed release cycle duration 80% by spearheading ReadyAPI adoption to reduce manual efforts in integration testing
- Redesigned app workflows to support nested processes via pub-sub design, enhancing granularity of 3 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, Networking, Reliability* April 2024

- Designed and implemented Raft consensus protocol to promote fault-tolerance and consistency in distributed data store
- 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