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, Dean's List Award (×6), Dean's Scholarship

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, C, HTML, CSS

Technologies & Tools: Spring Boot, MySQL, PostgreSQL, Angular, React, Pandas, NumPy, PyTorch, Kafka, AWS, Terraform, Git, Docker, Kubernetes, Unix, Linux, Jira

Certifications: AWS Cloud Practitioner, Scrum Master

Work Experience

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

- Managed team of five co-op developers, serving as primary liaison between industry stakeholders, university faculty, and development team. Oversaw all project planning and development efforts, instituting Agile environment as Scrum Lead
- Developed full-stack platform extension for GitHub Classroom (Go Fiber, TypeScript, React) to introduce grading functionality and assignment analytics. Released beta version to 4 courses, serving 1000+ students and 50+ graders
- Designed scalable and highly-available AWS cloud architecture using Terraform. Deployed Dockerized backend on ECS with Fargate and frontend on S3/CloudFront, reducing forecasted costs 30% with AWS CloudWatch for resource scaling

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
- Designed 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
- Trained BiGRU neural network with PyTorch, predicting direction and degree of stock movement in real-time

Facial Detection Attendance Tracker | *Python, GCP, Azure, OpenCV* January 2024

- Designed facial recognition system to automate roll call at club meetings of 100+ members, achieving 0.913 AUC-ROC
- Slashed API calls 80% by integrating GCP's Video Intelligence to identify and skip all video segments without faces
- Leveraged Azure's Face API and OpenCV to annotate detected faces with bounding boxes and predicted labels

Activities & Interests

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

Interests: Downhill Longboarding, Coffee, Mechanical Keyboards, Traveling, Restaurants, Bodybuilding