# 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 ( $\times 6$ ), Dean's Scholarship

Coursework: Algorithms and Data Structures, Object Oriented Design, Fundamentals of Software Engineering,

Database Design, Distributed Systems, Natural Language Processing, Intro to Machine Learning, Multivariable Calculus, Mathematics of Data Models, Probability and Statistics, Linear Algebra

#### TECHNICAL SKILLS

Languages: Java, Python, C#, SQL, TypeScript, JavaScript, C, HTML, CSS

Frameworks & Libraries: Spring, MySQL, PostgreSQL, Redis, Angular, React, Pandas, PyTorch, Kafka

**Developer Tools:** Git, Docker, Kubernetes, Unix, Linux, Jira

## EXPERIENCE

Software Engineer Intern — Salesforce, San Francisco, CA

May 2024 – August 2024

- Extended 2 Spring Boot/WebFlux APIs with 8 new routes to introduce admin functionality in Intelligent Document Processing tool, enhancing data management (Postgres, Redis) and runtime microservices (AWS Textract)
- Spearheaded launch of IDP Admin Console UI, delivering 12 monitoring features with AngularJS and Bootstrap. Reduced average troubleshooting time 30% by shifting solution engineers from terminal to centralized application
- Researched performance/functional impacts of LLM Gateway integration using Kubernetes and Splunk. Enabled expansion of supported models, boosting average confidence scores 8% and broadening customer base
- 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 Tools Co-Op — Insulet Corporation, Acton, MA

July 2023 - December 2023

- Automated hardware connectivity testing in quality assurance tool with C# and MySQL, scaling batch capacity 500%. Reduced batch processing time by 2 hours and slashed related manual labor
- Pioneered team's transition to automated API testing by automating execution of 42 manual software tests with Python. Consequently spearheaded integration of ReadyAPI, mitigating human interaction to reduce test suite run time 80%
- Implemented 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 after solving critical system failure impacting 4 high-value clients
- Diagnosed and resolved 31 software bugs by interfacing with customers, implementing fixes using C# and Angular
- Built app in internal Hackathon to automate local environment setup, reducing average onboarding time by 2 days
- Directed one Agile stand-up meeting per week for 10-member team, demonstrating leadership and initiative
- Debugged 70+ failing end-to-end tests using Selenium and NUnit, contributing to 8% improvement in test coverage

### 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 (e.g., order volume imbalance, micro-price, Bollinger Bands). Warehoused data using MariaDB
- 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, Google Cloud Platform, Azure, OpenCV

January 2024

- Designed facial recognition system to automate roll call at club meetings of 100+ members
- 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 (Breakthrough T1D), Undergraduate Career Mentor

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