

Sebastian Tremblay

tremblay.se@northeastern.edu | [Personal Website](#) | [GitHub](#) | [LinkedIn](#)

EDUCATION

Northeastern University
Bachelor of Science in Computer Science + Artificial Intelligence, Mathematics Minor
ACHIEVEMENTS: **3.99/4.00 GPA**, “Top 100 Graduating Seniors” Honoree
COURSEWORK: Algorithms, Data Structures, Computer Systems, Software Engineering, Machine Learning I/II

Expected May 2025
Boston, MA

TECHNICAL SKILLS

LANGUAGES: (Advanced) Java · Python · TypeScript (Proficient) C# (Intermediate) Go · C

FRAMEWORKS/LIBRARIES: Spring Boot (*REST API*) · Pandas · NumPy · Scikit-Learn · React

CLOUD/DEVOPS: AWS (*Cloud Practitioner*) · Kubernetes · Docker · Terraform

DATABASES: Redis · PostgreSQL · MySQL · MongoDB

WORK EXPERIENCE

Founding Engineer — GitMarks, *Boston, MA* September 2024 – Present

- Launched grading platform extension for GitHub, exposing students to industry workflows (*React, Go, PostgreSQL*)
- Managed team of 5 full-time employees**, leading development efforts via one-on-ones, code reviews, and Agile ceremonies. Partnered with Northeastern University stakeholders to define product requirements and release timeline
- Designed highly available AWS architecture (*Docker, Terraform*), achieving 99.99% uptime for **700 weekly users**
- Engineered event-driven microservice for GitHub webhooks (*AWS SQS*), resolving race conditions in 10,000+ repos
- Amplified scalability by integrating Redis for caching/session management, **slashing GitHub API queries 22%**

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

- Released full-stack admin console for Intelligent Document Processing (IDP) tool (*Angular/Bootstrap*), deploying 12 monitoring features to 40 internal weekly users. **Reduced troubleshooting time 30%** by replacing legacy solution
- Investigated performance impacts of integrating next-gen LLMs into IDP service (*Kubernetes/Splunk*) via synthetic/load testing. Enabled expansion of supported models, **scaling client base 2.4×** with optimized subscription tier coverage
- Constructed 8 routes for Spring Boot/WebFlux REST API to support debugging functionality in IDP Admin Console
- Orchestrated volunteer event with 40+ attendees and charity presenter. **Spotlighted on Salesforce’s Instagram**


Software Tools Co-Op — Insulet Corporation, *Acton, MA* July 2023 – December 2023

- Developed QA tool to automate medical device connectivity testing (*C#, MySQL*), processing **6,000 units per day**
- Slashed duration of tool’s release cycle 80% by **automating 42 integration testing steps** (*Python*), igniting transition to automated API testing. Spearheaded ReadyAPI adoption, hosting workshops for non-technical QA staff
- Re-designed app workflows to support event-driven notifications, enhancing granularity of 3 live status indicators


Software Engineer Intern — Ultimate Kronos Group (UKG), *Virtual* May 2022 – December 2022

- Earned Employee of Month award for diagnosing and resolving critical **system outage affecting 6,000+ customers**
- 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**, deploying solution to over 300 engineers


PROJECTS & PUBLICATIONS

Kubernetes Scheduling Optimization  | *Distributed Systems, Scalability, Performance* November 2024

- Explored scalability constraints in Kubernetes scheduler, revealing performance impacts of limited contextual awareness
- Synthesized 6 SOTA network/hardware-aware methods to optimize latency & GPU efficiency in compute-intensive jobs

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

PASSIONS

Activities: Fundraiser Coordinator (Raised \$65,000 for *Breakthrough T1D*), Undergraduate Career Mentor

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