Sebastian Tremblay

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EDUCATION

Northeastern University — Boston, MA

Bachelor of Science in Computer Science, Artificial Intelligence. Mathematics Minor — May 2025

ACHIEVEMENTS: **3.99/4.00 GPA**, Top 100 Graduating Seniors Honoree

TECHNICAL SKILLS

LANGUAGES:	Java · Python · TypeScript · Go
FRAMEWORKS/LIBRARIES:	Spring WebFlux · Spring Boot · PyTorch · Scikit-Learn · React
CLOUD/DEVOPS:	AWS (*Cloud Practitioner*) · Kubernetes · Docker · Terraform
DATABASES:	Redis · PostgreSQL · MongoDB

WORK EXPERIENCE

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

- Architected Git-native learning management software aimed at exposing students to industry workflows. Spearheaded **acquisition by Northeastern University**, orchestrating Fall 2025 rollout for 3,000 students across CS/DS courses
- Designed end-to-end cloud infrastructure, ensuring **99.99% uptime for 700 weekly users** via auto-scaling policies, active-active failover, and load balancing. Provisioned with Terraform, serving Dockerized microservices on AWS ECS
- Engineered distributed, event-driven pipeline for processing GitHub webhooks (*Go, AWS SQS*), preserving in-order execution of 20,000 weekly events. Automated retries and dead-letter queues, **eliminating 95% of manual recovery**
- Managed team of 5 engineers, owning architecture planning, strategic product direction, and one-on-one mentorship

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

- Architected observability and monitoring console for document processing tool, enabling 60+ weekly users with tools to triage and resolve failures. **Reduced MTTR 30%** by replacing terminal-based solution with centralized UI (*Angular*)
- Constructed 8 reactive API routes (*Spring WebFlux*) to aggregate runtime metadata across microservices. Queried PostgreSQL and Redis using non-blocking I/O to support 1M+ executions and enable real-time debugging workflows
- Refactored logic and scope for validating document schemas, reducing false errors and **manual review volume 80%**
- 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 **4,800 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

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

- Earned Employee of Month award for diagnosing and resolving critical system outages **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 Favorite" award**, deploying solution to over 300 engineers

PROJECTS

AI Solvers for NYT Wordle ⊡ | *Python, TypeScript, React, PostgreSQL, Supabase* — April 2025

- Implemented three search agents—Monte Carlo, Greedy, Minimax—for NYT Wordle puzzle, achieving 95.9% win rate and averaging under 4.25 guesses across 13,000 word dictionary. Built web app to manually experiment with models
- Automated MCTS/Minimax hyperparameter optimization using Optuna with TPE Sampler, bumping win rates 4%
- Constructed distributed cache for solver outcomes, cutting MCTS runtime 35% and keeping UI latency under 200ms

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

PASSIONS & PURSUITS

ACTIVITIES:	Fundraiser Coordinator (Raised $65,000 for *Breakthrough T1D*), Undergraduate Career Mentor
INTERESTS:	Automation, Electric Longboarding, Teaching, Traveling, Coffee