

Sebastian Tremblay

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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**
- 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

- Architected observability and monitoring console for document processing tool with ~12,000 WAU, providing tools to triage and resolve failures. **Reduced MTTR 30%** by replacing terminal-based solution with centralized UI (*Angular*)
- Informed optimized model rollout strategy in core IDP service by driving integration testing for next-gen LLMs with Kubernetes load tests and Splunk metrics. **Expanded client coverage 2.4×** and boosted confidence scores ~8%
- Constructed reactive API routes (*Spring WebFlux*) to aggregate metadata across 3 microservices. Enabled real-time debugging workflows via non-blocking I/O queries (*R2DBC*), **supporting 1M+ document processing executions**
- Refactored logic and scope for validating document schemas, reducing false errors and **manual review volume 80%**


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**
- Automated 42 acceptance testing steps (*Python*), **slashing length of tool's release cycle 80%**. Ignited transition to automated hardware integration testing by spearheading ReadyAPI adoption, hosting workshops for non-technical 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 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%
- Deployed global cache for solver results, avoiding redundancy to cut MCTS runtime 35% and keep UI latency <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

EDUCATION

Northeastern University Boston, MA

Bachelor of Science in Computer Science, Artificial Intelligence. Mathematics Minor

GPA: 3.99/4.00

AWARDS: Top 100 Influential Seniors Honoree, Dean's Scholarship (\$16,000/yr)

PASSIONS

ACTIVITIES: Type 1 Diabetes Fundraising (Raised \$65,000 for Breakthrough T1D), Undergraduate Career Mentor

INTERESTS: Automation, Electric Longboarding, Teaching, International Traveling