Pouria Amini

Website | GitHub | LinkedIn | pamini@uwaterloo.ca

EDUCATION ____

University of Waterloo | Bachelor of Software Engineering

Relevant courses: Algorithms, Data Structures, Operating Systems, Databases, Software Engineering Principles

EXPERIENCE

Intuit | Software Engineer Intern

- Increased TurboTax development velocity by 40% through refactoring page navigation logic with TypeScript/React, • enabling a 2-week earlier readiness of the product for market release to 5M+ users.
- Developed a Python CLI with LRU caching to optimize Java artifact builds, reducing CI/CD build time by 67% and • eliminating 5 hours of weekly wait time for 25 developers.
- Conducted a performance analysis with Linux perf and BPF to identify potential request latency slowdowns before • migration, saved **100+ engineering hours** for the release of a **container-based platform**.

Xe | Software Developer Intern

- Accelerated onboarding by 5x for 400+ new users monthly by optimizing identity (KYC) verification with a Plaid integration using AWS Kinesis and webhooks, resulting in a **\$90k+ annual revenue increase**.
- Engineered a traffic mirroring mechanism on Kubernetes using Istio for real-time A/B testing and canary releases, ٠ resulting in 550+ additional conversions annually for new onboarding incentives.
- Optimized the consensus protocol of a distributed ledger system in C++ for near real-time settlements, reducing • transaction confirmation time by 36% for over **10,000 daily transactions**.

Inossem | Java Developer Intern

- Optimized order fulfillment across 6 warehouses by developing shortest-path algorithms with dynamic route • adjustments using Java/WebSockets to reduce operational costs, saving \$130k+ annually.
- Reduced CPU time by 34% in microservices in Azure by converting inter-service communication from REST to • gRPC over mTLS, lowering average response time from 500ms to 70ms.
- Developed Spring microservices to monitor and report warehouse operations and track 20,000+ SKUs for real-time inventory visibility, reducing 25+ stockout incidents per month and preventing \$10k in lost revenue.

PROJECTS

Dislog | Distributed Write-ahead Logging System

- Built a clone of Apache Kafka in Go using a distributed consensus algorithm for leader election and replication. •
- Optimized I/O performance through memory-mapping files and a buffer pool to reduce disk I/O overhead. ٠
- Implemented custom Kubernetes controllers to automate the scaling of load balancers based on pod count.

BugTracker | Simplified Jira for simple projects

- Developed a full-stack web application using React, JavaScript, and Java to track and manage software bugs.
- Deployed the application using AWS Elastic Beanstalk for **auto-scaling** and **load balancing** during outages. •

TRex | Translation Glasses

Designed and implemented a real-time language translation system on a Raspberry Pi, utilizing C for hardware control, a lightweight machine learning mode with TensorFlow Lite in Python and AR libraries.

ACHIEVEMENTS

Tools & Platforms:

Canadian Computing Competition (Senior Division), top 3% of 3,200 contestants		2021
Facebook HackerCup, top 12.5% globally of 35,00 contestants		2021
SKILLS		
Languages & Frameworks:	TypeScript, Python, Java, C++, C, Go, React, Spring, SQL, HTML, CSS, Shell	

Linux, AWS, Kubernetes, Docker, PostgreSQL, Kafka, Spark, MongoDB, Git

Newmarket, ON | Jan. 2023 - Apr. 2023

Montreal, QC | May 2022 - Aug. 2022

Toronto, ON | Sep. 2023 - Dec. 2023

Sep. 2021 - Apr. 2025

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