

Skills

- Strong programming skills in Kotlin/Java and Golang
- Experienced with Vert.x, AWS, gRPC, Rest, Docker, Kubernetes, Terraform, Postgres, Redis, RocksDB, and Raft
- Versed with diagnostic, profiling, and debugging tools for JVM and Golang
- Knowledgeable of CI/CD and build tools such as GitHub Actions, Jenkins, Maven, and Jib
- Understanding of observability using metrics [Prometheus], distributed tracing [Jaeger], and log aggregation [Loki/ELK]
- Comfortable with transport protocols like TCP, HTTP, WebSocket, and UDP

Experience

Senior Software Developer – Database – TraceLink Inc. (Boston, USA) [October 2021 – Present]

- Built a query tracking and analysis sub-component to aid in identifying slow read queries
- Developed service discovery and clustering mechanism to automatically cluster Kubernetes pods as raft nodes
- Improved read query performance by batching and fetching keys in parallel from RocksDB
- Authored multiple tech docs to outline the work needed to achieve business initiatives
- Designed an experimental query engine using BitSets to improve predicate matching performance
- Investigated and resolved multiple Out of memory errors, performance regressions, and production issues
- Introduced various convenience HTTP endpoints to aid in debugging and increase system visibility

Software Developer - DevOps – Miovision Inc. (Kitchener, Canada) [December 2020 – October 2021]

- Developed lambda functions in Golang to receive webhooks and terminate long running EC2 instances
- Setup multiple CI/CD pipelines using GitHub Actions
- Configured AWS infrastructure using Terraform

Software Developer - Backend – TextNow Inc. (Waterloo, Canada) [May 2018 – December 2020]

- Built a high throughput service using gRPC and Golang to persist internal events in Protobuf format to Kafka
- Developed a low latency service to serve as TextNow's Phonebook using AWS DynamoDB and Golang
- Designed a JWT based Authentication service to be used with an API gateway
- Shipped various features and bug fixes in PHP monolith application

Education

Master of Computer Science - Wilfrid Laurier University

Bachelor of Computer Science and Accounting and Finance - University of Waterloo

Talks and writings

- Talk at the RocksDB Meetup: <https://youtu.be/7QHI7JQEc5c?t=1281>
- Udemy instructor for Backend development with Vert.x: <https://www.udemy.com/course/backend-development-with-vertx/learn/?referralCode=063C2D57CCB957C5088C>
- RPC over WebSockets in Kotlin: <https://blog.aawadia.dev/2023/04/21/ws-rpc>
- DNS based service discovery in Golang: <https://blog.aawadia.dev/2020/12/25/go-dns-service-discovery>