

SUMMARY

- **Education: University of Waterloo, BAsC Computer Engineering** **2017 - 2022**
- Experience with distributed systems & microservice infrastructure, server backends, data pipelines
- **Java, Go, C++, Scala, Kotlin, Python, SQL; AWS, K8s, Envoy, GraphQL, gRPC, Kafka, Elasticsearch**

EXPERIENCE

FACEBOOK

AUG 2022 – PRESENT*Software Engineer, Storage**New York, NY*

- Implemented support for access-key ACLs, providing granular configuration to bucket rate limits
- Created a wasted-effort metric to track partial reads/writes that should not have been scheduled
- Launched use-case & shard-based throttling for requests to the KV store, to prevent overloading

FACEBOOK

AUG 2021 – DEC 2021*Software Engineer Intern, Serverless Compute**Toronto, ON*

- Revamped the resource manager for Async's job execution platform, which runs **3T jobs per day**
- Built execution throttlers based on regional/global rate limits, backpressure signals, & failure rate

COURSERA

AUG 2020 – DEC 2020*Software Engineer Intern, Platform Infrastructure**Toronto, ON*

- Constructed a site-wide item change log for observability, leveraging Kafka and Elasticsearch

SQUARE

JAN 2020 – APR 2020*Software Engineer Intern, Traffic Infrastructure**San Francisco, CA*

- Built an HTTP firewall for all ingress traffic to Square, filtering **700,000+ QPS** for malicious requests
- Created a service to detect and shift traffic from load balancer instances failing to proxy requests
- Integrated a rate limiting service into the Envoy-based service mesh, managing all sidecar traffic

SQUARE

MAY 2019 – AUG 2019*Software Engineer Intern, Cash App Server**Kitchener, ON*

- Developed server-sided functionality to process account closures and user alias management
- Delivered a tool allowing targeted notifications & support for users impacted by a downed service

BLACKBERRY

SEP 2018 – DEC 2018*Software Engineer Intern, Network Security**Waterloo, ON*

- Wrote a build script in Python for automated OS flashing, with a connection proxy and cache

OPENTEXT

JAN 2018 – APR 2018*Software Engineer Intern, Cloud Backend**Toronto, ON*

- Led the development of a highly scalable microservice used to manage customer databases

PROJECTS, OPEN SOURCE CONTRIBUTIONS

TARTEEL

ARABIC PRONUNCIATION CORRECTION

- Created a data pipeline to process audio (standardize, autolabel and filter) to train ML models