Akshay Pall

akshay.pall@uwaterloo.ca • akshaypall.me • github.com/AkshayPall

Experience

Bloomberg | Software Engineering Intern (Infrastructure)   *Jan 2020 - Present*

- Maintained and developed features for a massive SaaS app built with React and Redux.
- Contributed to the development of an e2e testing framework written in Python Selenium.

Facebook | Software Engineering Intern (Distributed Database)   *May 2019 - Aug 2019*

- Added support for *end-to-end exactly-once processing* semantics in Apache Heron by implementing a variant of the two-phase commit algorithm. Details in design doc.
- Designed and implemented a system (in Scala) that made Twitter's interactive query infrastructure (Presto and Hive) GDPR-compliant.

Oath | Software Engineering Intern (Backend)   *Sep 2018 - Dec 2018*

- Implemented centralized authentication and path-based routing in PlanGrid's Kubernetes cluster using Envoy and Istio. This greatly improved developer productivity.
- Built Spinnaker pipelines to allow *phased rollout* for ingress-related infrastructure changes.
- Contributed to the effort of instrumenting distributed tracing to improve visibility.

Yahoo! | Software Engineering Intern (Backend)   *Jan 2018 - Apr 2018*

- Worked on the metrics submission pipeline that streams millions of data points per second.
- Owned the time-series metadata creation service, written in Go, by ensuring its availability.
- Migrated the service's IPC layer to gRPC to improve reliability. Implemented consistent hashing and request termination, details in blog post.

CBC/Radio-Canada | Native Apps Developer Coop (Android Product)   *May 2017 - Aug 2017*

- Developed many business-critical, A/B-tested, user-facing features using React and Rails.
- Pioneered and shipped Universe's first front-end app that consumes its new GraphQL API.

Writings

- TODO

Education

University of Waterloo Bachelor of Software Engineering
Sep 2016 - May 2021 (expected)
85% cumulative GPA, *2x Term Dean's Honours List*