Lawrence Pan

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Summary

Languages: Golang, Python, Java, Scala, JavaScript, C/C++
Interests: Distributed systems, Data infrastructure, Streaming architecture
Technologies: Kubernetes, Linux Kernel, Spark, Postgres, Kafka, Consul, Envoy

Experience

PlanGrid | Software Engineer Intern - Infrastructure   *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

Datadog | Software Engineer Intern - Distributed Systems   *Jan 2018 - Apr 2018*

- Worked on the metrics submission pipeline that streams **millions** of data points per second
- Owned the time-series creation service written in Golang 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

Universe | Full-Stack Engineer Intern   *May 2017 - Aug 2017*

- Developed numerous 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

Plotly | Front-End Engineer Intern   *May 2016 - Aug 2016*

- 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

Writings

- My one-liner Dropbox client (**HackerNews front-paged**)
- Lessons learned from writing a text editor in C (**HackerNews front-paged**)
- How gRPC helps improve reliability and fault tolerance at DataDog

Education

University of Waterloo Bachelor of Software Engineering
Sep 2016 - May 2021 (expected)
89.7% cumulative GPA, *Dean's Honours List*