Akshay Pall

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Experience

Facebook / Meta | Software Engineering - *AI/ML Infrastructure*   *June 2021 - Present*

- (Currently) Building a distributed, low-latency/realtime graph store and engine (C++) for ML usecases (eg. embeddings, ads recomendations)
- (Previously) Contributed to a feature engineering framework (Python) that generates privacy compliant, globally optimized feature pipelines (Spark).
- Launched a scalable, extensible CI/CD system to deploy 10^4s of feature changes daily
- Saved millions in feature coverage drops by designing continuous regression testing systems & in compute by applying various Spark optimizations (eg. bucketing) cross-stack

Bloomberg | Software Engineering Intern   *Jan 2020 - April 2020*

- Designed a real-time, data-agnostic distributed alerting system on custom criteria in Python
- Utilized custom Solr for prospective search on criteria (Solr queries); Kafka for event I/O; and ComDB2 for persistence, authentication, and preferences
- Maintained versioned document state in Cassandra for in/out alerting
- Provided observability and alarming on system metrics via Grafana

Facebook / Meta | Software Engineering Intern   *May 2019 - Aug 2019*

- Wrote a PrestoDB connector for Cubrick, an in-memory MOLAP DB, to leverage its low-latency with Presto's scalability and extensibility in Java using Thrift for RPC
- Implemented query filter pushdown optimization to smartly move portion of compute to storage, reducing amount of unnecessary data pulled from source

Yahoo! / Oath | Software Engineering Intern   *Sep 2018 - Dec 2018*

- Wrote crawler for Yahoo Calendar to remediate missing notifications for $> 2M$ users in Java
- Observed and corrected bugs across Yahoo services: message queue (CMS), distributed NoSQL DB (Sherpa), and search index (Vespa); and in ical4j Calendar Library

Projects

Yada | *Yet Another Docs App*   *June 2021 - Present*

- Yada is a document editor that keeps all related content up to date by building documents, slideshows, etc. by referencing a "source-of-truth". Built with React, Neo4J, and GCP
- Winner of the Norman Esch Entrepreneurship Award at the University of Waterloo

Education

University of Waterloo Bachelor of Software Engineering

Sep 2016 - May 2021 - Dean's Honours List