Akshay Pall

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Experience

OpenAI | Member of Technical Staff - *Infrastructure*   *Oct 2024 - Present*

- Driving cross-domain infra ops with improvements across CI/CD systems (deploy agents, test runners, build agents) across multiple business functions, improving system extensibility, reliability, job isolation, and release velocity (*Docker, Kubernetes, Kafka, Envoy, Cloudflare*).

Facebook / Meta | Software Engineering - *Infrastructure*   *June 2021 - Sep 2024*

- Contributed performance and observability improvements to a distributed, low-latency/realtime graph store and engine (C++) for ML usecases (eg. embeddings, ads recomendations)
- Reduced cold-start time from 1 hour to minutes via custom replication & recovery logic
- Solidified infrastructure around 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 preventing outages and saving compute by 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; ComDB2 for persistence; and Cassandra for alerting

Facebook / Meta | Software Engineering Intern *May 2019 - Aug 2019, Jan 2020 - April 2020*

- 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 optimizations to move portion of compute to storage
- Contributed cross-stack to new test determinator for efficient test selection for Mobile CI

Projects

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

- 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 - With Distinction, Dean's Honours List