

# Akshay Pall

[akshay.pall@uwaterloo.ca](mailto:akshay.pall@uwaterloo.ca) • [akshaypall.me](http://akshaypall.me) • [github.com/AkshayPall](https://github.com/AkshayPall)

## Experience

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

- Developing a distributed alerting system for fixed-income securities using Apache Solr, Kafka, and Redis,

**Facebook** | Software Engineering Intern (Distributed Database) *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
- Implemented **query filter pushdown** optimization to smartly move portion of compute to storage, reducing "scanned to returned" data ratio to as low as **1:1**
- Identified maximal set of query filters to push down to table scan by converting and traversing the filters to **conjunctive normal form** at runtime

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

- Wrote crawler for Yahoo! Calendar to find and schedule missing notifications, remediating issues for over **2 million users**
- Observed and corrected bugs across Yahoo services: **message queue** (CMS), **distributed NoSQL DB** (Sherpa), and **search index** (Vespa)
- Contributed to **open-source ical4j** library via bugfixes, legacy version maintenance, and test coverage improvements

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

- Worked on Mail Migration Framework, moving over **80M accounts** from AOL to Yahoo
- Rewrote core components of framework to be multi-threaded to improve adherence to SLAs
- Built CLI tool to run individual jobs on-demand for troubleshooting
- Reconfigured system workflow properties to **remove deadlocks** and **reduce job failure rates by 10%**
- Produced and consumed additional metadata for all jobs to improve **context reconstruction** on recovery

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

- Developed major UI/UX features such as a **theme engine** for the CBC News App, increasing user customization for over **400k+ MAUs**, resulting in **25% increase** in user session time
- Contributed to internal Android framework to reduce development time in sister CBC apps

## Writings

- [TODO](#)

## Education

**University of Waterloo** Bachelor of Software Engineering

*Sep 2016 - May 2021 (expected)*

85% cumulative GPA, 2x Term Dean's Honours List