Ali Abdullah

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Summary

- Experienced with C++, Java, JS, Python, Kotlin, GraphQL, SQL; Rails, MongoDB, Kafka and Jupyter
- Interested in Full Stack Development, Data Engineering, Systems Design and Big Data Analytics

Education

University of Waterloo (Canada) Sept '16 – Apr '21
Honors Computer Engineering Co-operative Program (with Distinction)

Work Experience

Wealthsimple *Toronto, ON*
Senior Software Engineer June '21 – present

- Introduced and led the development of Dividend Reinvestment Plans (DRIPs), enabling the reinvestment of over **$100 Million** and facilitating more than **600,000** automated trades monthly
- Integrated the **TL;DR** newsletter in the trade app which enabled automated content management, tracking engagement metrics and push notifications for weekly releases, increasing in app engagement
- Implemented real-time portfolio balance updates using WebSockets for pub/sub connections and optimized server load balancing to support active user traffic
- Developed corporate accounts with role-based access control and trading functionality for clients

Square (Dessa, Cash App) *Waterloo, ON*
Software Engineering Intern Jan – Dec '20

- Lead development of Solid, a mutual aid platform that provides relief based on community driven causes
- Designed and implemented the storage layer, schema definitions and the financial ledgers for the service
- Engineered the Spotify integration supporting **10K+** artists with **$1M+** in **COVID-19** donations
- Developed risk assessment and debt recovery tools for fraud assessment, account takeovers and ID checks

Ultimate Software *Toronto, ON*
Software Engineering Intern May – Aug '19

- Designed and built a performant event driven delivery service for emails, SMS and push notifications
- Improved testing infrastructure increasing resiliency, ensuring fault tolerance, and saving developer hours

Shopify *Ottawa, ON*
Mobile Engineering Intern Sep – Dec '18

- Built Testify, an android plugin that generates fast, deterministic screenshots for integration tests
- Reduced memory usage by over **10%** by applying selective pruning transformations on user queries

Data Engineering Intern Jan – Apr '18

- Built a SQL to PySpark Job converter, saving **200+** developer hours by leading refactor initiatives
- Used Spark, RedShift, Presto, Mode and Tableau analyzing finances, growth and customer satisfaction

Research

uWaterloo Database Systems Group May – Aug '18
Undergraduate Researcher (Prof. Grant Weddell) *Waterloo, ON*

- Researched main-memory databases that use dynamic code-generation as part of its execution model

Projects

- **Testify** – Developed an android testing library that tests device language, transitions and orientation
- **mqueue** – Prediction model forecasting housing price, visualized using MatPlotLib and Jupyter

Open-source contributions to: **nltk**, **mozilla**, **airbnb**, **pymanifold**, **airport**, **waterloo colony counter**