Andrew Liang

Software Developer

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Skills

Languages

Python, C/C++, JavaScript, Bash, Java, Scala, SQL

Technologies

Git, UNIX, Flask, React, Redux, Jenkins CI, Azkaban, BigQuery, Hadoop, Elasticsearch, Grafana, Akka, Node.js, MySQL

Education

University of Waterloo

Bachelor of Software Engineering, 2015 - 2020

Awards

President's Scholarship of Distinction

University of Waterloo

Awarded to students with an entry average of at least 95%

Interests

Attending hackathons, crosswords, acoustic guitar, barbering

Experience

Software Engineering Intern   *May 2016 - Aug 2016*

Paytm Labs • Product Personalization   *Toronto, ON*

- Patched data processing pipelines in **Scala, Python** to ensure **seamless availability** of data
- Refactored **Scala, Akka** code to **decrease latency** for real-time API now serving **100M** users
- Created **Grafana** data dashboard using **Lucene** to visualize business and traffic metrics
- Built tool in **Python, Bash** to concurrently execute N data processing flows, cutting developer time needed to pay tech debt by **90%**
- Built **Node.js** web app with **React/Redux** to visualize product recommendation metadata
- Wrote automated, fault-tolerant scripts with **Python, Bash** to **eliminate all downtime** during deployment for real-time apps
- Validated data sanity with **spark-shell** and **SQL** via **BigQuery**
- Interfaced with **Azkaban**, **Jenkins**, **HDFS, Elasticsearch** to complete biweekly sprints

Projects

alexandria – Python, Flask, MySQL   *Hack the North, September 2016*

SMS-based, wifi-independent subscription service for reading public domain books on a phone. Built core API modules and data processing scripts for raw data ingestion and data seeding.

murmur – Scala, Akka   *August 2016 – September 2016*

WIP message-driven, actor-based group chat via the command line. Uses **akka-actor** for concurrency, scalability and **akka-stream** for message processing. Handles client messages with a WebSocket server.

Glide – Java, Android SDK   *July 2015 – January 2016*

Glider simulator for Android. Designed and implemented custom movement algorithms and practiced proper OOP principles. Published on the **Google Play Store**, achieving a **4.8** rating, with **1000** downloads.

C60 – JavaScript, Firebase   *Hack the North, September 2015*

Real-time Pebble smartwatch networking app which enables users to exchange contact details with nearby users. Simulates the effects of NFC.