Andrew Liang driven to deliver data-based solutions

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Skills

Languages

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

Technologies

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

Design Patterns

OOP, actor model, publish-subscribe

Education

University of Waterloo

Bachelor of Software Engineering, 2015 - 2020

Awards

President's Scholarship of Distinction

University of Waterloo
Awarded to students achieving an admission average of 95% or greater

Interests

Attending hackathons, crosswords, acoustic guitar, barbering

Experience

Paytm Labs   *May 2016 - Aug 2016*

Product Personalization • Data Engineering Intern   *Toronto, ON*

- Patched critical data processing pipelines to ensure **seamless availability** of data
- Built Node.js web app with React/Redux to **visualize product recommendation metadata**
- Wrote automated, fault-tolerant deployment scripts to **eliminate all downtime** for real-time, client-serving applications
- Performed refactor work to **decrease latency** for real-time API now serving **100 Mn** users
- Created Grafana data dashboard to **evaluate performance** of recommendation models
- Built command-line tool to concurrently execute N data processing flows to **reprocess over 2 TB of data**, cutting time needed to pay tech debt by **90%**
- **Validated data sanity** of user activity with spark-shell and SQL queries
- Interfaced with Azkaban, Jenkins, BigQuery, HDFS, Spark to complete biweekly sprint tasks

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*

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 near field communication.