

A.K.A. SEUNG GYU KANG | 4A SOFTWARE ENGINEERING

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Skills

Languages Java, C++, JavaScript, Ruby, Python, Dart, SQL

Libraries/Tools React, Redux, Ruby on Rails, PostgreSQL, MongoDB, Node, Django, Git, Docker

Experience

Drop | Software Engineering Intern

January 2020 - Present

- Overhauled user referral system, enabling flexible multi-million user experiments and campaigns
- Scoped and implemented several internal/external features on a React Native/Ruby on Rails app
- Explored aggressive, multi-tiered caching strategies to significantly improve API performance

Search Ads 360 @ Google | Software Engineering Intern

May - August 2019

- Designed and implemented a distributed data pre-computation/analysis pipeline framework in C++
- Updated and added concurrent issue detection tools in Java for optimized data reporting
- Implemented card-based UI in Angular/Dart for detected issues to provide insights on ROI trends

Sobol @ ConsenSys | Full Stack Software Developer Intern

September - December 2018

- Containerized environments and set up automated integration testing with Docker and CircleCI
- Added many critical features in **Node/Express** for data stored in a hybrid **Mongo/Neo4j** architecture
- Implemented complex data-driven UI as part of navigation redesign using React/Redux + D3

StackAdapt | Full Stack Software Developer Intern

January - April 2018

- Added complex data visualization UI with React/Redux and amCharts for major product update
- Optimized many areas of **Ruby on Rails/MySQL** API, reducing load times on reporting tools by 90%

Projects

Cognilite (WIP) | Neural Network Experiments

Personal Project

- Implementing a genetic neural network ground-up in C++ based on NEAT and LSTM architectures
- Adding RPC server/clients for (hopefully) performant cross-platform sequential training

Awards

Waterloo Engineering Competition, Programming Division 2nd Place

2017

Various Mathematics Contests

2015 - 2017

Euclid Math Contest Top 1% | CIMC 1st Place | Harvard/MIT Math Tournament Top 3%

Other Activities & Interests

UW A Cappella Club | Music Director of The Water Boys, ICCA Finalists **Hack the North** | Hackathon event and Frontend Developer Volunteer

Education

University of Waterloo

2016 - 2021 (Expected)

- Candidate for Bachelor of Software Engineering, Artificial Intelligence Specialization
- 91% Cumulative Average, Dean's Honour List, Sandford Fleming Foundation Scholarships

Nanyang Technological University (Exchange Studies)

August - December 2019