

# David Luo

3B Software Engineering

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## SKILLS

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**Languages:** Python, C/C++, JavaScript, PHP, Swift, Java, Scala

**Technologies:** Git, SQL, pandas, scikit-learn, Gerrit, Google App Engine, jQuery

## EXPERIENCE

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### Microsoft

May – Aug. 2017

*Software Engineer*

*Tokyo, Japan*

- Developed workflow to analyze over 30 million rows of word conversions from Japanese input method, found and ranked 20 key factors of incorrect conversion
- Increased data overlap by 20x to improve analysis between user feedback and tracked data
- Implemented a bag of words model to find context words, improving word prediction by 5%
- Prototyped news article recommendation system based on users' typing history

### Ritual

Sept. – Dec. 2016

*Data Scientist*

*Toronto, ON*

- Individually designed and built machine learning pipeline to predict likelihood of referral success, improved success of referral suggestions from 60% to 70%
- Reduced run time of BigQuery database sync script by 50% using parallel computing
- Maintained and added new tools to internal reporting web application, used by general managers and CEOs to easily monitor the status of users, merchants, and revenue

### Osellus Mobile

Jan. – Apr. 2016

*Mobile Developer*

*Toronto, ON*

- Implemented iOS application which reinforces learning by allowing instructors to distribute quizzes and link relevant materials to each quiz
- Optimized application's built-in cache to reduce fetch time by 80%
- Migrated and refactored Objective-C codebase to Swift, reduced codebase size by 30%

### Ontario Ministry of Education

May – Aug. 2015

*Software Tester*

*Toronto, ON*

- Developed SQL scripts to generate reports and automate testing of data migration
- Increased accessibility of software for disabled users by implementing bug fixes
- Documented application workflow, used by all team members and presented to clients

## PROJECTS

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### CoffeeTime (Android, Java, Firebase, Coinbase)

- Allows friends to pick up coffee for each other, uses bitcoin as transaction currency

### Yelp Rating Predictor (Python)

- Predicts review star rating using a classifier trained with NLP techniques

## EDUCATION

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University of Waterloo, Bachelor's in Software Engineering

2014 – 2019 (expected)