

# Ernest Wong

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## Skills

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**Programming** Python, Scala, C++, Java, Ruby, JavaScript, SQL  
**Frameworks** Play, Ruby on Rails, Android, BackboneJS, Django, Node.JS, Tesseract, OpenCV  
**Data** MySQL, Cassandra, PostgreSQL

## Experience

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### Facebook

Seattle, WA

SOFTWARE ENGINEERING INTERN (INFRASTRUCTURE)

Sept 2017 - Dec 2017

- Developed and deployed an indexer service which listens to our Zookeeper ensemble and provides visibility into total Zookeeper size data using C++.
- Developed system which detects growth of Zookeeper ensemble and provides breakdown of growth by size of Zookeeper nodes.
- Implemented clustering algorithm to group Zookeeper nodes with similar names to provide a useful report of total Zookeeper size usage.

### Coursera

Mountain View, CA

SOFTWARE ENGINEERING INTERN (BACKEND)

Jan 2017 - April 2017

- Developed scalable services for Coursera's Enterprise team using Scala, Cassandra, MySQL, and Kafka.
- Built notification system to remind users to enroll in courses, resulting in an increase in user engagement metrics.
- Developed peer recommendation system which allows users to recommend courses to other learners.

### PagerDuty

San Francisco, CA

SOFTWARE ENGINEERING INTERN (FULL-STACK)

May 2016 - Aug 2016

- Developed features for PagerDuty's Incident team using Scala, Cassandra, MySQL, Ruby on Rails, and Android.
- Maintained highly available Scala services responsible for aggregating and reliably delivering notifications to users.
- Built new incident management feature on PagerDuty's web and mobile platform.
- Implemented metrics system to improve visibility of critical system, allowing engineers to quickly identify issues.

### Inkling

San Francisco, CA

SOFTWARE ENGINEERING INTERN (FRONT-END)

Aug 2015 - Dec 2015

- Developed core Python API service, consumed across all Inkling products.
- Built Inkling's Backbone digital content reader app with Django middleware.
- Implemented key features in Inkling cross-title library search functionality.

### Boltmade

Waterloo, ON

SOFTWARE ENGINEERING INTERN (FULL-STACK)

Jan 2015 - April 2015

- Built multiple entire web applications with Ruby on Rails and AngularJS that were shipped to production.
- Developed both large scale applications and small-scale web applications from ground-up.
- Led weekly sprint planning meetings with clients and discussed design implementations.

## Projects

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### OCR Sudoku Solver

[HTTP://GITHUB.COM/ERNESTWONG/SUDOKUSOLVER](http://github.com/ErnestWong/sudokusolver)

- Android application which allows user to take picture of Sudoku puzzle and provides solution using OpenCV and TesseractOCR.

### Project Euler

[HTTP://GITHUB.COM/ERNESTWONG/PROJECTEULER](http://github.com/ErnestWong/projecteuler)

- Solutions to 40-50 math problems found on <http://projecteuler.net>. Solutions written in C, C++, C#, and Java.

## Education

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### University of Waterloo

Waterloo, ON

4B COMPUTER ENGINEERING

September 2013 - May 2018

- Distributed Systems, Adaptive Algorithms, Operating Systems, Compilers, Computer Networks