

# Ernest Wong

<http://ernest-wong.me>  
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## PROGRAMMING

JavaScript (Backbone, AngularJS)  
Ruby (Ruby on Rails)  
Python (Django)  
Java (Android)  
C/C++ • C#  
HTML/CSS • SQL

## TECHNOLOGIES

git • vim • bash  
OS X • linux  
openCV • tesseract

## SOFTWARE PRACTICES

agile • pair-programming  
scrum • TDD • MVC

## EDUCATION

**UNIVERSITY OF WATERLOO**  
Computer Engineering  
2013 - 2018 | Waterloo, ON

## CONTACT

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## EXPERIENCE

### **INKLING** | Software Engineering Intern

Aug 2015 – Present | San Francisco, CA

- Developing Inking's consumer digital content web reader, built in Backbone and Django.
- Improved web reader's custom word-highlighting algorithm.

### **BOLTMADE** | Full Stack Developer

Jan 2015 – May 2015 | Waterloo, ON

- 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.
- Contributed to weekly sprint planning meetings with clients and discussed design implementations.

## PROJECTS

### **SUDOKUSOLVER** | Sudoku Puzzle OCR Cam Solver

<http://github.com/ernestwong/sudokusolver>

- Android application which takes picture of Sudoku puzzle and provides solution.
- Uses OpenCV computer vision library and image processing to identify puzzle and Tesseract OCR to identify numbers.
- Customized image processing algorithms—used a combination of OpenCV functions and custom algorithms.

### **CONNECTD** | Connect all social media with one click

<http://github.com/ernestwong/connectd>

- Ruby on Rails mobile web application that allows user to search for other users and send invitations on all social media platforms with a single button
- Used social media API services (Facebook, Twitter, G+, LinkedIn) to send invitations to users

### **MUSEDREAMS** | An IoT hack with Muse headband

<http://github.com/ernestwong/musedreams>

- Hardware hack using Muse headband that detects when user is about to fall asleep and makes adjustments to external surroundings
- Analyzed EEG data and developed algorithm that recognizes user's sleepiness using state machine
- Python server which interprets EEG data and posts state to Rails API for Android application

### **PROJECT EULER** | A collection of logic/coding puzzles

<http://github.com/ernestwong/projecteuler>

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