ERNEST WONG

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COMPUTER PROFICIENCY

- Languages: Ruby, Javascript, Java, C/C++ C#, HTML/CSS, Python, SQL
- Frameworks/Libraries: Ruby on Rails, AngularJS, Android, Node.js, OpenCV, Tesseract
- Software/Tools: Git, Bash, Vim
- Software Development Practices: Agile, Pair-Programming, Scrum, TDD, MVC, MVVM

WORK EXPERIENCE

Boltmade- *Software Developer, Full Stack* January 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
- Exposed to web UI/UX design methodologies such as user story mapping

Legal Aid Ontario, IT Operations May 2014 – August 2014
Toronto, ON

- Wrote Perl scripts to parse large database and to automate processing of data

PROJECTS

Sudoku Camera OCR Solver, Android Application

- 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, Mobile Web Application

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

MuseDreams, Arduino, Web Service, Android Application

- 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 Muse EEG data and posts user state to Rails API which is consumed by Android application. Arduino used to control light switch/LEDs to dim lights.

Project Euler, Math/Logic Problems

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

EDUCATION

Candidate for Bachelor of Computer Engineering September 2013 - Present
University of Waterloo, Waterloo, Ontario

- President’s Scholarship, Engineering Entrance Scholarship