

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

WORK EXPERIENCE

Boltmade- *Software Developer, Full Stack*
Waterloo, ON

January 2015 – May 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
- Contributed to weekly sprint planning meetings with clients and discussed design implementations
- Experienced with web UI/UX design and user story mapping

Legal Aid Ontario, IT Operations
Toronto, ON

May 2014 – August 2014

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

PROJECTS

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
- AngularJS and Ionic front-end for mobile UX optimization
- Used OAuth authorization system for user authentication

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

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.

UWInfoSession, Android Application

- Android application which accesses Waterloo API via HTTP requests and displays list of upcoming information sessions to user

EDUCATION

Candidate for Bachelor of Computer Engineering
University of Waterloo, Waterloo, Ontario

September 2013 - Present

- President's Scholarship, Engineering Entrance Scholarship