Ernest Wong

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PROGRAMMING

Python • JavaScript
Java • Ruby
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 – December 2015 | San Francisco, CA

- Developing core Python API service, consumed across all Inkling products.
- Building Inkling's Backbone digital content reader app with Django middleware.
- Implemented key features in Inkling cross-title library search functionality.
- Improved digital content reader's custom smart word-highlighting algorithm to greatly improve user experience.

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