PATRICK WONG
patrick.wong@uwaterloo.ca
https://patwong.github.io/

US Citizen

Cell: (226) 868-1798
US: (408) 800-5762
Home: (905) 812-2880

EDUCATION

Bachelors of Mathematics, University of Waterloo October 2016
Majors: *Computer Science* and *Computational Mathematics*, Minor: *Combinatorics and Optimization*

SUMMARY OF QUALIFICATIONS

Technical Skills

Languages Python, SQL, Java, C#, MATLAB, C#, C++/C, Ruby
Tools Ruby on Rails, Git, Linux, PostgreSQL, Hue

Work Experience

Mandrel Script Team Intern, Connected Solution Experts, Richmond Hill, Ontario December 2017 – Present
- Analysed and tested client's Hadoop-to-DB2 ETL pipeline with SQL
- Automated creation of hundreds of regression test cases for testing framework using Bash and Python scripts
- Improved in-house testing dashboard's UI by adding features in Java, HTML, and CSS

Technology Intern, Loring Ward, San Jose, California May 2013 – August 2013
- Fixed and maintained computer hardware, communicating with vendors to resolve infrastructure problems
- Solved user issues with Windows 7, Outlook, and web browsers

Personal Projects and Relevant Experience

Global AI Hackathon June 2017
- Prototyped app to use Microsoft Emotion API, overlaying emoji onto human faces based on detected emotion
- Devised module to capture frames from static video files as input to webapp in Python

MLB Batted Ball Stat Visualizations December 2016 – April 2017
- Engineered Python module to produce interactive histograms and scatterplots in HTML
- Performed statistical analysis using the numpy, scipy, and pandas libraries

notedump November 2016 – December 2016
- Organizes common-use text files into a single Windows application, written in C#

Relevant Coursework

Applied Cryptography
- Implementation and understanding vulnerabilities in encryption schemes, hash functions, block chain

Computational Linear Algebra
- Applied computational methods to solve eigenproblems, least square problems, and matrix factorization

Numeric Computation for Financial Modeling
- Implemented binomial lattice, Monte Carlo, and finite difference methods for option pricing