

Abel Romer

Full Stack Developer
Vancouver, BC

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Education

- **Quest University Canada** Squamish, BC
B.A.Sc., Mathematics and Computer Science Sep. 2012 - May 2017
 - Relevant courses: Java programming, theoretical computer science, logic, graph theory, combinatorics, calculus 1-3, analysis, abstract algebra

Projects

- **Employee Scheduling Software** Vancouver, BC
Collaborative business venture Nov. 2017 - Jul. 2018
 - Linearly optimized the employee scheduling process in a full stack web application.
 - Implemented server side request handling with Python Flask and MongoDB, algorithmic optimization with PuLP, and client side interfacing in HTML, CSS, Javascript and JQuery.
- **Baseball Game Predictor** Vancouver, BC
Personal project Jan. 2019
 - Collected and preprocessed MLB data from the 2017 and 2018 seasons in Pandas.
 - Implemented statistical feature selection methods including chi-squared and linear discriminant analysis.
 - Fit data to machine learning classifiers including decision trees, random forests, SVM and simple neural networks.
- **Other Projects**
At home 2017-2018
 - Built a personal website with React.js and Express.js.
 - Designed a Python program using OpenCV and dlib to control Chrome's dinosaur game by smiling.
 - Built a Python desktop application in PyQt to query photos by keyworded metadata.
 - Wrote a Java AI to play the pen-and-paper game Dots and Boxes, using minimax with alpha-beta pruning and transposition tables.

Work Experience

- **The Art of Problem Solving** Online
Grader Jan. 2018 - now
 - Reviewed and corrected student submissions for mathematical accuracy, precision, style and clarity.
- **Quest University Canada** Squamish, BC
Peer Tutor Sep. 2013 - May 2016
 - Mentored students in calculus, differential equations, spherical trigonometry and rhetoric.

Technical Skills

Languages: Python, \LaTeX , Java, Javascript (JQuery, React.js, Express.js, Node.js), HTML, CSS

Databases: MongoDB, SQLite, MySQL, Postgres

Version Control/OS/Libraries/Other: Git, UNIX (macOS), Pandas, SciKit Learn, PuLP