Abel Romer

Full Stack Developer
Vancouver, BC

contact on website
contact on website
https://www.github.com/ahblay

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