Darian Fry

Vancouver BC, Canada · dariankfry@gmail.com · +1 (778) 918-7254
https://darianfry.github.io · linkedin.com/in/DarianFry · github.com/DarianFry

Skills

Python, Java, C++, JavaScript, HTML, CSS, R, Matlab, git, Bootstrap, Responsive Design

Education

University of British Columbia - *Vancouver, Canada* 08/2015 - 06/2020
Bachelor's Degree · Mathematics
GPA 3.3

Lancaster University - *Lancaster, UK* 01/2020 - 06/2020
Exchange · Computer Science
Go-Global Award: Received tuition scholarship for academic performance

Experience

Private Tutor, Golden Success Tutors - *Remote* 06/2020 - Current
Working as an online Math and English tutor primarily to high school students based in China. Helping students with essay writing, pre-calculus, and calculus 1 & 2.

Lifeguard, UBC Aquatic Center - *Vancouver, Canada* 05/2017 - 12/2019
Effectively managed the relationship with the patrons, while maintaining all critical pool utilities. Instructed all levels of swimmers and provided the appropriate technical expertise.

Projects Experience

Buses 'R Us - *Java Android Application*
A map application that marks stops and bus routes on the Greater Vancouver Transit system (Translink), retrieves real time arrival information at stops, plots user's location on the map, and highlights the nearest stop. Extracted and implemented Java class associations from UML class diagrams. Wrote and executed extensive unit tests for robust classes in jUnit. Built multiple parsers including a string parser, JSON Object parser, and JSON Array parser.

Traveling Salesman Project - C++ *Research Project*
Researched on the NP-Complete version of the Travelling Salesman Problem (TSP). Applied Christofides, Kruskal's, Nearest Neighbour, and Brute Force algorithms to solve several real life specific versions of the TSP. Showed how the methods for each scenario can be modified so the problem can be solved in polynomial time. Improved the previous best runtimes of the algorithms researched by 3 to 10 percent. The project was primarily programmed in C++.

Courses

Data Structures, Algorithms, Software Engineering, Database Systems, Web Development, Algebra and Coding Theory, Numerical Computation for Algebraic Problems, Computational Linear Algebra, Computational Methods

Probability, Stochastic Processes, Statistics, Regression Analysis, Linear-programming, Discrete Optimization, Optimization in Graphs and Networks, Abstract Algebra, Combinatorics, Vector Calculus, Mathematical Analysis, Differential Equations I & II

Achievements

Elite Varsity Athlete - *UBC Swim team* 09/2015 - 07/2018

- 3 Time Bronze Medalist at Can-West Championship (2016 - 2018)
- Finalist at World Trials and Summer Nationals (2016 - 2018)
- UBC Varsity Swim Team, Tuition Athletic Scholarship (2015-2018)