

# **Danny Wei**

Computer Science + Statistics Student

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### **TECHNICAL SKILLS**

Programming Languages: Python (Pandas, Numpy, Pulp), Java, PHP, Javascript, React.js, R

Databases: MySQL, Oracle

**Tech:** Power BI, SQL Developer, Tableau

Competencies: Machine Learning, Statistical analysis, OOP, Functional Programming, Linear Programming

**EXPERIENCE** 

#### Data Science Co-op, Copperleaf Technologies

Jan 2022 - Present

STUFF

#### **HIGHLIGHTED PROJECTS**

#### Relational Database Translink Model-PHP, Oracle SQL

Oct - Nov 2021

- Collaborated with a team of three to create a relational model representing BC's Translink System
- Transformed the Translink system using entity diagrams, and created a relational database using oracle SQL.
- Created an intuitive PHP frontend for users to add objects such as Buses, stops, and routes into a relational database to be efficiently stored.

### NBA Player Scoring Visualization - MySQL, Tableau

July 2021

- Created a Tableau Visualization using NBA player scoring statistics from 2020/21 season to construct a visual dashboard displaying a comparison of 3-point, 2-point, and free throw scoring
- Queried data from a non-time series relational database of over 500 players using MySQL to sort and filter data for the purpose of visualization

## Mentor-Mentee Pairing System - Python CSV

June 2021

- Took initiative by using previous Python CSV experience to semi-automate the mentor-mentee pairing process, reducing the processing time from 6 hours to mere seconds
- Implemented object-oriented design with the algorithm used in dating apps to score mentees and mentors based on similar responses to questions; students with scores above a user-determined threshold are paired

## Optimal player lineups in Hockey w/ Linear Programming - Python Pulp

Feb 2021

- Created an optional project for Linear Programming class: Optimizing the Vancouver Canucks
- Used data from a relational database about the Canucks and the Bruins 2011 regular season in Python
  Pulp to calculate and determine a potentially different outcome to the series based on each team's
  regular-season performance
- Performed sensitivity analysis to see how certain changes could have affected the outcome of a game, such as adjusting the maximum playing time of the best player and minimizing the number of penalties given out
- Achieved the highest score in the class earning 90% on this analysis

## **EDUCATION**

## 4<sup>th</sup> Year Bachelor of Science, Computer Science & Statistics

Sep 2019 - Dec 2023

University of British Columbia, Vancouver, BC

Courses: Machine Learning, Statistical Inference, Relational Databases, Linear Programming