# **Ting Guo**

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## **EDUCATION**

# University of British Columbia (UBC), Vancouver, BC

BSc, Combined Mathematics & Economics, cGPA: 4.1/4.33

- Honours: Science Scholar, Dean's Honour List
- Relevant computer science coursework: data structure (Java), computer algorithm & analysis (C++), machine learning & data mining (Python), numerical approximation (Matlab), computer vision (Python)

#### **EXPERIENCE**

# Vancouver School of Economics Undergraduate Society

Jul 2022 - Present

Expected: Dec 2022

Data Analyst

Vancouver, BC

- Established a budget sheet for current school year using **Microsoft Excel** and proposed budget improvements through critical data analysis, decreasing projected surplus by 50%
- Cooperated with a team member to create an infographic about digital ID in Canada using Canva, which is provided as an educational resource to 1000+ economics students
- Supported the production of presentations by providing relevant numbers to increase accountability

### **British Columbia Investment Management Corporation**

Sep 2021 - Apr 2022

Reporting & Analytics Co-op (Data Engineer + Data Scientist)

Victoria, BC

- Designed and implemented a scalable **ETL pipeline** which computes aggregate and bench returns of different clients using **Python (Pandas)** and **SQL** by pulling data from 10,000,000+ rows in 10+ tables on **Microsoft SQL Server**
- Created an interactive **Tableau** performance dashboard for individual clients that is updated daily automatically and used in client meetings by Department Head
- Migrated part of an ETL pipeline from R to Python for better maintenance purposes, reducing code runtime by ~90%
- Collaborated coding with team using **Git version control**
- Developed a **statistical model** that checks outliers in a database and sends warning emails

# **University of British Columbia**

Jun 2021 - Present

Research Assistant

Vancouver, BC

- Collected personal and corporate data of 1000+ billionaires through sources such as Wikipedia and press articles in business media to assist with **research** on exploring the role of tax avoidance in explaining inequality
- Formatted raw data and fixed/removed incorrect/duplicate entries to construct a user-friendly database

# **University of British Columbia**

Jul 2020 - Dec 2020

Imagine Orientation Leader

Vancouver, BC

- Supported a group of 9 incoming students, as part of a large scale faculty welcome event with 2000+ attendees, with their transition into UBC and throughout the first term by sending bi-weekly check-in emails and answering inquiries
- Fostered social connections amongst 100+ students by contributing to Canvas discussion boards
- Conducted a friendly online welcome session on Orientation Day to the group of incoming students
- Recognized as an outstanding leader and invited by the Department of Mathematics to Meet Your Major event

#### TECHNICAL PROJECTS

# **Titanic - Machine Learning from Disaster**

- Analyzed the factors (gender, socio-economic class, etc.) that may influence a passenger's survival using various plots on Jupyter Notebook using Python (Numpy, Pandas, Matplotlib, Scikit-learn)
- Forecasted the survival of passengers with KNearestNeighbour (KNN) model, achieving a ~70% accuracy

# Maximization of University of British Columbia's Undergraduate Tuition Revenue (link)

- Collected data of the factors that influence UBC's tuition revenue (eg: faculty, citizenship), formulated a linear program, and solved the linear program using **Python** in order to maximize UBC's tuition revenue
- Interpreted values such as shadow prices and slack values, and conducted in-depth sensitivity analysis to examine the
  effects of changes in various parameters on UBC's tuition revenue

#### To-Do List

- Used **Java** to build a to-do list that keeps track of to-do items and checks completed items off to improve productivity
- Extracted the latest prices of selected stocks from **JSON API**