

Xiaofei SUN

Vancouver, BC

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EDUCATION

University of British Columbia

BA in Economics, Minor in Data Science

GPA - 4.33/4.33 (90.0%)

Vancouver, CA

09/2022-Now

- **Core Courses:** CPSC 203 - Programming, Problem Solving and Algorithms, CPSC 330 - Applied Machine Learning, STAT 201 - Statistical Inference for Data Science, STAT 301 - Statistical Modelling for Data Science, MATH 221 - Linear Algebra, STAT 302 - Introduction to Probability.

INTERNSHIP EXPERIENCE

Fullgoal Fund Management

Quantitative Finance Group Intern

Shanghai, China

06/2024-08/2024

- Modified and updated Python code for overseas equity benchmark return data, resolving errors related to data extraction. Successfully debugged issues and improve the code readability, resulting in accurate and functional code execution.
- Utilized Excel to recreate data visualizations, including fund manager style score tables, radar charts, and Brinson performance attribution analysis.

The Affiliated Hospital of Qingdao University

Data Analysis Intern

Qingdao, China

07/2023-Now

- Applied data visualization techniques using R, analyzing correlation in data to enhance the clarity of insights.
- The anticipated impact includes a targeted reduction of approximately 30% in the risk of bone fenestration during orthodontic treatments. Underscores the practical application of data-driven insights to real-world problems.
- Collaboratively developed with interdisciplinary teams, emphasizing effective teamwork and solution implementation.

RESEARCH PROJECTS

UBC CPSC 330 – Applied Machine Learning

Independent Researcher, Multiple Classification ML Models, Feature Engineering

Vancouver, Canada

09/2024-12/2024

- Used Python to build multiple binary classification models to predict the default behaviors of credit card clients.
- Independently conducted exploratory data analysis, data preprocessing and transformations, feature engineering, different classification model building, optimization, and interpretation including feature importance.

UBC ECON 326 – Introduction to Econometrics II

Team Leader, Linear Regression Model, Result Analysis from an Economic Perspective

Vancouver, Canada

09/2024-12/2024

- Used R to analyze the correlation between individual socioeconomic status in neighborhoods and the placement of public art installations in Vancouver, by building and comparing multiple forms of the linear regression model.
- Mainly responsible for preprocessing real-world census data, modelling using the linear regression model, and model assumption testing. Took part in the evaluation part of the results in an economic context.

RESEARCH EXPERIENCE

Algorithms for Big Data | Supervisor: Prof. David Woodruff, Carnegie Mellon University

Online Research Program

08/2024-12/2024

Research Group Member

- Conducted research on the application of ViT models with hyperattention mechanism on skin cancer classification task using Python. Identified the advantages of hyper-attention in saving computational cost and keeping accuracy.
- Developed and evaluated the integration of a hyper-attention layer into Vision Transformer (ViT) models, achieving a significant reduction in model parameters (e.g., 306M to 206M in ViT-l32).
- Conducted literature reviews to support the research framework, contributed to data collection and preprocessing efforts, and assisted in debugging and fine-tuning models.
- Collaborated with a team of four to write and paper, preparing to publish the paper in the first half of 2025 at the latest.

TECHNICAL PROFICIENCIES

- **Languages:** Fluent in English, Native in Chinese
- **Programming:** Python, R, Excel, Julia, Java (beginner)