

YILIU CAO

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Education

University of Toronto

Double Major in Economics & Statistics, with a Mathematics Minor

- GPA: 3.77/4
- Awards: Dean's List Scholar (2021 Summer, 2022 Winter, 2023 Winter)
- Core Courses: Methods of Data Analysis, Design and Analysis of Experiments, Methods of Multivariate Data, Machine Learning, Time Series Analysis

Toronto, ON

Sep.2020 - Present

University of Oxford

Summer Abroad Program

- Core Course: Big Data Tools and Applied Machine Learning for Economists

Oxford, UK

Aug.2023-Sept.2023

Professional Experiences

United Nations Global Platform for Big Data China Hub(UNBDC)

Big Data Research Intern

- Used R to process and analyze large volumes of industrial data to deliver specialized insights, such as examining patterns of industry inflows and outflows in Zhejiang Province, identifying reasons for industry relocation and influencing policy, etc.
- Participated in State Grid data collection training as well as learning the practical application of linear regression analysis of expected total energy consumption by type in 2030
- Engaged in three United Nations Statistics Division 'Beyond GDP Sprint' meetings to better understand global statistics frameworks and their implications for socioeconomic policies.

Hangzhou, China

Jun.2023-Aug.2023

Boston Consulting Group (BCG) Data Science Virtual Experience Program

Virtual Data Science Intern

- Engaged in multiple projects at BCG X, learning how to identify the clients' goals and perform the data analysis using Python and real data
- One project is for PowerCo to determine the price sensitivity for different clients, performing the Hypothesis Framing, Exploratory Data Analysis, Feature Engineering & Modeling and make the appropriate conclusions.

Remote/Virtual

May.2023-Jul.2023

Project Experiences

STA304: Analysis of popular vote for the Liberal and the Conservative Party in the 2025 Canadian Federal Election

- Utilized R in this individual project to analyze data and create linear regression models to better understand voting patterns.
- Used post-stratification to divide the population into cells based on age, sex and university completion.
- Predicted that the Conservative Party will obtain a bigger popular vote than the Liberal Party, and received a perfect score of 95/100.

STA313: Advocating for Sustainable Development within Canada

https://public.tableau.com/views/STA313FinalProjectProduct/FinalProduct?:language=en-US&:display_count=n&:origin=viz_share_link

- Solved difficult issues in the Tableau portion as a leader in this group project, and delivered a presentation.
- Tableau was applied to create four interactive dashboards that portrayed increasing energy usage, possible affections on people's health, and predictions using linear regression.
- Achieved 14.5/15 in the Tableau section and 28.5/30 in the final grades.

Extracurricular Activities

Henan Normal University Statistics Tutor

- Developed and delivered statistics tutor sessions to a group of Masters and PhD Physics students.
- Addressed gaps in knowledge of statistical principles to students primarily schooled in a different academic area.
- Systemically explained a wide range of statistical subjects from basic concepts (like distribution) to advanced theories (like linear regression).

Jun.2023 - Jul.2023

University of Toronto Volunteer Notetaker Program

- Provided academic support to students with disabilities by taking detailed notes during lectures for two courses (STA305 and STA347)
- Received co-curricular credit for participation in the program

Jan.2023 - Apr.2023

Skills

Technical skills: Proficient in R, Tableau, LaTeX; Familiar with Python, SQL, Linux, Fortran, C++(Beginner)

Language: Mandarin (Native); English (Proficient)