

Jingchi Wei

Data Analyst

elizabethwei0127@gmail.com

(647) 676-6664

jingchi.squarespace.com

EDUCATION

University of Toronto - B.S., Statistics and Psychology

Sep 2017 - Jun 2022

Toronto, ON

Relevant courses

Methods of Data Analysis, Statistical Methods for Machine Learning, Design and Analysis of Experiments, Methods for Multivariate Data, Data Visualization

WORK EXPERIENCE

Chestnut Residence - Business Analyst

Sep 2021 - Mar 2022

Toronto, ON

- Collected, cleaned, and analyzed past 3-year data in the hospitality industry in Ontario via SQL and Python to build databases and determine competitor rates, identified strategies to improve hotel services and recommended competitive pricing to the manager
- Built data visualizations using SQL and Tableau for business KPIs and business insights that reduced manual reporting by 3 hours weekly
- Received, cleaned, and prepped hospitality sales and marketing time-series data via Python to help other data scientists build marketing mix models
- Collaborated with and garnered feedback from other departments and documented user data for later analysis

ByteDance (Company of Tiktok) - Data Analyst and Content Operation

May 2021 - Sep 2021

Shanghai, CN

- Designed and implemented A/B experiments and surveys for online educational content that improved the conversion rate by 15 basis points and reduced churn by 10 basis points
- Collected, cleaned, and analyzed data on all online educational videos using SQL and Python to evaluate content performance and identify any current issues; used data-driven methods (e.g: A/B test and Ad-hoc analysis) and generated weekly data reports for PMs, which drove operational performance and enhanced efficiency
- Built a logistic regression model to help the SEO team decide what keywords to use and which population to target, resulting in a 15% lift in Dali education site visitors in 2021
- Collaborated with other 2 data scientists to update dashboard and visualizations via Tableau on content performance and population portfolio. Performed cohort analysis that identified a strategy to attract more audience by 15% and increase pricing by 10%

Health System Performance Network - Data analyst intern

May 2020 - Sep 2020

Toronto, ON

- Learnt a statistical software STATA in two weeks and collaborated with 1 senior data analyst to complete an evaluation of over 100 Ontario health care organizations; inferred meaningful insights and helped these organizations and government improve integrating care (e.g.patients' care) and develop targeted change management strategies
- Prepared, modified, and integrated survey records for later analysis by generating dummy variables and using If function in STATA on a survey with 42 questions on 480 health care workers in Ontario

- Calculated interclass correlation coefficient (ICC), conducted ANOVA testings and applied regression models (e.g. linear regression and bivariate analysis) on the survey data and identified domains (clinical functional integration, leadership approach, additional financial resources, etc) these health organizations and government need to improve

PROJECTS

Covid-2019 Data Cleaning, Visualizations, and Time-series Prediction

- The goals of this project were to extract certain Covid-19 information and build a dashboard to present the information
- Collected, aggregated, and cleaned the Covid-19 data on death, infection, and vaccination information in every country via SQL. Created four databases for later visualizations on global numbers, total deaths per continent, percentage of the population infected per country, and a predicting model
- Used Tableau to build a dashboard that contains 4 different visualizations presenting different Covid-related information

2025 Canadian Federal Election Prediction and Report

- The goals of this project were to identify what factors influence people's voting choices; predicted 2025 Election results, and created a data report for the general public
- Collaborated with 3 other data analysts to collect and clean census data and survey data that contained 24623 survey records via Rstudio for later analysis
- Created 4 data visualizations to present voters' key demographics (education level, province, and age), helping readers to understand the data better
- Used Multilevel Regression Post-stratification (MRP) to identify the correlations between voter's factors and their likelihood to vote for the Liberal Party; produced significant p-values and predicted the proportion of the Canadian citizens that will vote for the Liberal Party with minimized errors

Movie Correlation and Visualizations

- The goals of this project were to clean the movie data that contains data on 4 decades of movies and find which factors have a high correlation with total revenues
- Cleaned and modified the data using Python Numpy; created scatter plots and correlation matrix using Python Seaborn
- Found that votes (number of user votes) and budget have the highest correlation with total revenues

SKILLS

- SQL (relational databases & data cleaning)
- Python (Pandas, Scikit-learn & Numpy)
- Tableau (data visualizations & dashboards)
- Power BI (data visualizations & dashboards)
- R language (data cleaning, analysis, & visualizations)
- STATA (data cleaning & analysis)
- Excel VBA
- Google Analytics
- A/B Testing & Experimentation & Ad-hoc Analysis Machine Learning & Regression Models
- Attention to detail, communication skills, problem-solving, critical thinking, & teamwork