Grace (Weijia) Yin

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EDUCATION

University of British Columbia

MSc in Statistics

University of British Columbia

BSc, Honors in Statistics

Vancouver, Canada 2020 – 2022 Vancouver, Canada 2015 – 2020

SKILLS SUMMARY

Programming Tools: Python, SQL, R, SAS, Julia, Java, Git, LATEX

Machine Learning: NLP, MCMC, Causal inference, Variational inference, Classification, Neural network Statistical Competency: Hypothesis testing, Regression, Statistical inference, Data visualization, A/B Testing

Other Software: MySQL, Excel, TensorFlow, Jupyter Notebook, Tableau

Languages: Native Proficiency in Chinese Mandarin; Professional Working Proficiency in English

PROFESSIONAL & LEADERSHIP EXPERIENCE

StatisticianVancouver, CanadaB.C. Centre for Excellence in HIV/AIDS | SAS, SQL, ROct 2022 - Oct 2023

- Answered research questions by wrangling longitudinal and censored HIV data for exploratory data analysis
- Fitted machine learning models including regression models and classification models to explore the risk factors; selected and optimized models by tuning hyperparameters
- Contributed to two submitted papers by conducting statistical analysis; translated complex statistical concepts into comprehensible language for epidemiologists to help them accomplish manuscripts

Research Assistant Vancouver, Canada

University of British Columbia, Research Lab

Structural Causal Models Identification (Causal Inference) | Python

May 2019 – May 2022

- Described the causal mechanisms/causal relationship in a system to understand the structural of causal models
- Simulated regression models in Python for theory verification; summarized analytical outputs and presented to faculty and scholars in department seminars

Statistical Consultant Vancouver, Canada

University of British Columbia

Sep 2020 – Dec 2021

Wrote 5 consulting reports for clients with guidance on how to collect, clean and analyze their data

PROJECT EXPERIENCE

Employment Gender Bias | SQL & Tableau

May 2022 – June 2022

- Wrote SQL queries to retrieve data from the US employee database
- Combined MySQL and Tableau to create a dashboard to demonstrate the gender bias for US employees since 1990; created visualizations for the number of male and female employees in different years

Human Suicide Number Prediction | Python & R

Sep 2020 – Sep 2021

- Generated geo-specific prediction on suicide numbers and illustrated the regional suicide statistics in Canada
- Cleaned and imputed the global suicide data; built an interactive dashboard on R Shinny app to help users visualize and understand the trend of suicide rates

Autonomous Driving Prediction | Python & Julia

Sep 2020 – Dec 2020

- Collaborated in team for predictive modelling of the number of autonomous driving instances in US
- Deployed Multi-layer Perceptron and Convolutional Neural Network models for prediction

PUBLICATIONS

- N. T. Duy, P. Le-Long, and **W. Yin**: *Hardy inequalities and Caffarelli-Kohn-Nirenberg inequalities with radial derivative*, Journal of Mathematical Inequalities (2020)
- N. T. Duy, N. Lam-Hoang, N. A. Triet, and **W. Yin**: *Improved Hardy inequalities with exact remainder terms*. Journal of Mathematical Inequalities and Applications(2020)