Bingfan Liu

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SUMMARY OF QUALIFICATIONS

- Proficiency in data analysis using R, Python, STATA and Linux.
- Proficiency in querying and manipulation of data base in SQL.
- Excellent understanding of statistical and machine learning models.

EXPERIENCE

Teaching Assistant in Statistics **Expected Sept. 2019 – Aug. 2020**

University of Waterloo, Department of Statistics and Actuarial Science

- Tutoring for undergraduate statistics classes.

Research Assistant in Law Economics **Feb. 2017 – Apr. 2017**

University of Waterloo, Department of Economics

- Data collection for legislative activity in the Canadian House of Commons since Confederation.

EDUCATION

Master of Mathematics, Statistics **Expected Sept. 2019 – Aug. 2020**

University of Waterloo, Canada

- **Relevant Courses**: Deep Learning, Reinforcement Learning, Graphical Model, MCMC, Survival Analysis.

Bachelor of Arts, Honors Economics Joint Honors Mathematics **Sept. 2016 – Apr. 2019**

University of Waterloo, Canada

- **Relevant Courses**: Time series, GLM, Sampling and experimental design, Data types and structures
  Money and banking, International trade, Game theory.

Bachelor of Science, Honors Applied Mathematics **Sept. 2014 – Jun. 2016**

Shandong Normal University, China

AWARDS

The American Statistical Association

[1] DataFest Competition 2019 - Prize of Honorable Mention **May 2019**

- Forecasted and visualized athlete fatigue level using multiple times series and random forest.
- Visualized key driven factors with fatigue clusters using Python.

[2] DataFest Competition 2018 - Prize of Best Use of External Data **May 2018**

- Visualized the structure of the labor market demand and supply.
- Forecasted the labor demand fluctuations in different industries in the next five years.

University of Waterloo

[1] Dean's Honors List with Distinction **May 2019**

- Major Average: 90.69%

[2] Economics Achievement Award **May 2019**

- Outstanding academic achievement by an Honors student in Economics major program.

PROJECTS

Sampling and Experimental Design

- Constructed CRD, RBD and Factorial Design for multiple treatments experiments.
- Performed ANOVA tests and some visualization using graphical skills.

Generalized Linear Model

- Modeled clinical data by using logistic and Poisson regression.
- Handled over dispersed data by using Ad Hoc and mixed model methods.

Time Series Analysis

- Forecasted bitcoin price using multi-time series model.
- Performed portfolio optimization using CIBC, Google, Munich Re, Sinopec and Fibertech stock prices.

EXTRACURRICULAR ACTIVITIES

- Member of University of Waterloo table tennis club.
- Member of University of Waterloo Japanese language and culture club.