Junhao LIU

www.junhaoliu.com · www.linkedin.com/in/junhaoliu · junhaoliu11@gmail.com

Skills

- Statistical modeling, machine learning, causal inference, experimental design and A/B testing, consumer finance research, behavioral economics
- Python, R, Stata, SAS, SQL

Education

Ph.D. in Risk and Insurance, University of Wisconsin–Madison 2019

- Coursework: Ph.D. econometrics, machine learning, behavioral economics, industrial organization, insurance economics, risk management, actuarial modeling

M.S. in Mathematical Statistics, University of Cambridge 2012

- Research essay: Manipulation-Resistant Reputation Systems
- Coursework: operational research, time series and Monte Carlo inference, advanced financial models, stochastic networks, actuarial statistics

B.S. in Statistics and Mathematics (First Class Honors), University of Hong Kong 2011

- Research essay: Ordinary Bootstrap and Moving Block Bootstrap
- Coursework: statistical inference, probability and statistics, operations research, time series analysis, computational statistics, differential equations, functional analysis
- Finalist, S. T. Yao College Student Mathematics Contest (among the top 12 undergraduate students in Applied Math & Statistics in China)

Experience and Projects

Research Associate in Consumer Finance, University of Sydney 2019-now

- Designed **online experiments** and applied **discrete choice models** and **instrumental variables** to study the effect of broker usage on consumers' mortgage preference
- Conducted 5 research projects on mortgages and retirement savings in collaboration with multidisciplinary scholars, industry partners and government regulators
- Coordinated and independently taught a business research methods class (evaluations 4.7/5)

Ph.D. Candidate and Lecturer, University of Wisconsin–Madison 2014-2019

- Conducted 6 research projects in financial regulation and consumer finance
- Managed and cleaned data on the universe of insurance companies in the U.S. in **Stata**
- Applied **fixed effects regression, diff-in-diffs, and instrumental variables** with panel data on insurers and consumers to make causal inference
- Taught key business analytics and actuarial courses with a Distinguished Teaching Award
- Developed an auto-grading system for student projects in a 700-student class and received a Dean's Letter of Recognition in Teaching Innovation

Actuarial Consulting Analyst, Milliman Inc., Shanghai, China & Brookfield, WI, U.S. 2013-2014

- Accomplished 20+ consulting projects on auto insurance pricing with **GLM models** in **SAS**, insurance reserve modeling, and health insurance experience study in Asia and the U.S.
- Passed 4 actuarial exams in one year

Project Manager, Research in Industrial Projects for Students, Institute for Pure and Applied Mathematics, University of California, Los Angeles 2010

- Collaborated with LAPD to build a predictive model for gang-related crimes
- Led a student team to accomplish the project goals with high quality within 8 weeks