

Rui Hu

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EDUCATION	University of Massachusetts Amherst Ph.D. in Statistics. Advisor: Dr. Ted Westling.	Massachusetts, U.S. Aug 2020 - Aug 2024 Expected
	University of Illinois at Urbana-Champaign M.S. in Statistics.	Illinois, U.S. Aug 2016 - May 2018
	Central University of Finance and Economics Bachelor of Economics in Statistics.	Beijing, China Sep 2012 - Jun 2016
RESEARCH INTERESTS	causal inference; survival analysis; non-parametric estimation; sensitivity analysis.	
RESEARCH PROJECTS	Inference for Global Measures of Treatment Effect Heterogeneity <i>Paper in progress.</i>	
	<ul style="list-style-type: none">Derived two parameters as global tools for measuring heterogeneous treatment effects, as well as a corresponding estimation and inference framework in the context of nonparametric statistical methods.Applied the proposed method to a NHANES data set and developed an open-source R package for the proposed methodology and drafted the manuscript.	
	Sensitivity Analysis to Unobserved and Residual Confounding in the Effect of Physical Activity on Mortality among Former Smokers <i>Paper in progress.</i>	
TEACHING	Department of Mathematics and Statistics, University of Massachusetts Amherst	
	As Instructor <i>Statistics II (Honors Colloquium)</i>	Spring 2024
	As Teaching Assistant <i>R Tutoring Center (as coordinator)</i>	Fall 2023
	<i>R Tutoring Center</i>	Spring 2023
	<i>Regression Analysis</i>	Spring 2022 & 2023, Fall 2022
	<i>Statistics II</i>	Spring 2022
	<i>Fundamental Concepts of Statistics</i>	Fall 2021
	Department of Statistics, University of Illinois at Urbana-Champaign	
	As Teaching Assistant <i>Calculus II</i>	Fall 2017
	<i>Statistical Modelling in R</i>	Summer 2017
	<i>Statistical Computing</i>	Spring 2017

WORK EXPERIENCE	Quantitative Analytics Intern , Wells Fargo	North Carolina, U.S.
	<i>Corporate Model Risk</i>	Jun 2023 – Aug 2023
	<ul style="list-style-type: none"> • Collaborated with the model developer and team member to revalidate a commercial Basel model. Contributed to several sections in the model validation report, including model framework, data inputs, model estimation and testing. • Validated modeling codes in SAS and conducted sensitivity analysis and in-sample backtesting using Python. 	
	Machine Learning Engineer , JD.com	Beijing, China
	<i>Supply Chain R&D Department</i>	Aug 2018 – Aug 2020
	<ul style="list-style-type: none"> • Designed and implemented a scalable machine learning-based time series classification and forecasting framework using PySpark. Reduced wMAPE from 0.41 to 0.36. • Conducted experimental studies for the optimization of parameters of the inventory models. Monitored model performances, investigated data anomalies, and analyzed experiment results using Python and SQL. 	
OTHER EXPERIENCE	The 3rd New England Student Research Symposium on Statistics and Data Science	Apr 2024
	<i>Oral presentation:</i> Sensitivity Analysis to Unobserved and Residual Confounding in the Effect of Physical Activity on Mortality among Former Smokers	
	The 9th Chinese R Conference (Beijing session)	May 2016
	<i>Oral presentation:</i> Sentiment Analysis of News Articles for Stock Trends Prediction	
AWARDS	Meritorious Winner in 2015 Interdisciplinary Contest in Modeling	Spring 2015
	Semifinals in Women's Tennis (Group) at the 13th Guangdong Provincial Sports Games	Summer 2010
SKILLS	Technical skills: Advanced in R, Python and SQL; Proficient with PySpark and Hive. Languages: Fluent in Mandarin and Cantonese; Proficiency in English.	