

XINYU HOU

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EDUCATION

National University of Singapore

Aug 2022 - Present

Doctor of Philosophy in Operations Research

- Coursework: Stochastic Processes, Optimization

National University of Singapore

Aug 2021 - Sep 2022

Master of Science in Business Analytics

- Honors/Awards: Cargill Innovation Challenge 2nd Runner-Up
- Coursework: Advanced Analytics and Machine Learning, Hands-on with Business Analytics, Cloud Computing, Big Data Analytics Technology (PySpark), Operations Research and Analytics, Foundations of Business Analytics (Python Machine Learning), Data Management and Warehousing (SQL and NoSQL), and Analytics in Managerial Economics

New York University

Sep 2017 - May 2021

Bachelor of Arts in Economics and Mathematics

- GPA: 3.87 / 4.00
- Honors/Awards: Graduated Magna Cum Laude, Dean's List in AY2017-2018, AY2018-2019, and AY2019-2020
- Coursework: Microeconomics and Macroeconomics Analysis, Econometrics, Ownership and Corporate Control, Mathematics for Economics, Analysis, Linear Algebra, Statistics for Business and Economics, Mathematics of Finance, Probability Theory, Ordinary Differential Equations, Foundations of a Complex Variable, and Intro to Game Theory

RESEARCH WORK

Research Assistant

Sep 2021 - Present

National University of Singapore

- Conducted data cleaning and feature reduction for a demand dataset for forecast modelling
- Designed demand forecast models for a medical device company using conventional forecast models such as time series and multivariate linear regression and several machine learning algorithms

INDUSTRY EXPERIENCE

Data Science Summer Intern

May 2022 - Aug 2022

TikTok Singapore

- Provided end-to-end data analytic insights on advertisement integrity by creating and monitoring metrics such as accuracy score, conversion rate, pending time, etc.
- Collaborated with product managers and operations team on revamping advertisement review process, reduced 20% of manpower cost and yielded 30% increase in review efficiency
- Uncovered an presumed causal effect of a review variable on advertiser experience to be unsupported by data using Difference-in-Differences analysis, changing the direction of metric designing

Finance Department Summer Intern

Jun 2019 - Aug 2019

Shenzhen Investment Holdings

- In-charged of biweekly meeting minutes to align the understanding of the discussion and promote teamwork for a team of 30 colleagues
- Completed 2 monthly toll revenue analyses of Guangzhou-Shenzhen Superhighway and identified the impact of government policies and holidays on the toll income trends
- Together with the Deputy General Manager and the Finance Manager, successfully developed a 40-page in-depth financing proposal to raise 300 million HK dollars for a real estate project

ADDITIONAL INFORMATION

- Software and Coding Skills: Python (Numpy, Pandas, Scikit-Learn), SQL (CTE, Window Functions), Excel, R
- Languages: Chinese (Native), English (Fluent), Cantonese (Basic)
- Interests: Photography, Musical, Traveling