

XINYAO HAN

Cambridge, MA

+1 (617) 821-8462 | xinyao1@mit.edu | [LinkedIn](#): xinyao-han

EDUCATION

MIT SLOAN SCHOOL OF MANAGEMENT

Cambridge, MA

Candidate for Master of Business Analytics, Operations Research Center, August 2023

2022 - Present

- Coursework: Machine Learning, Optimization Methods, Analytics Edge, Analytics Lab
- ML Project: Social media ads CPA prediction on marketing strategy (OCT & XGB), with 26% cost reduction (Python, Julia)
- Optimization Project: Optimized delivery routes with random customer locations & stochastic travel times, reducing delivery cost by 60% (Julia)

NEW YORK UNIVERSITY

Shanghai, China

Bachelor of Science in Computer Science, Minor in Mathematics, GPA: 3.9/4.0

2018 - 2022

- Coursework: Natural Language Processing, Algorithms, Probability and Statistics, Econometrics
- NLP Project: Implemented BERT multi-task model on criminal legal dataset to answer paragraph questions
- Honors: NYU Honors Scholar, Global Futures Scholar, Dean's Honors List 2018-2022, NYU Excellence Award
- Leadership: Career Development Center Intern (Promoted to Leader), Undergraduate Business Association Vice President

TECHNICAL SKILLS

- Python (PyTorch, NLTK, scikit-learn, Selenium, Pandas), R, SQL, Julia, ArcGIS, C, Java, Git

EXPERIENCE

MIT OPERATIONS RESEARCH CENTER | LIBERTY MUTUAL

Cambridge, MA

Research Assistant to Professor Vivek Farias

Fall 2022

- Designed and implemented scalable imputation algorithm to imputed 2 high-dimensional matrices on 500k insurance data with \$1.2B revenue, analyzed imputation mechanisms, presented results to Data Science teams to improve pricing (Python)
- Performed tree models and neural network on insurance loss prediction, enhancing baseline model performance (Tensorflow)

MIT SLOAN | UNITED NATIONS

Cambridge, MA

Analytics Lab Team Member, UN Mine Action Service, Awarded 2nd Place out of 22 teams

Fall 2022

- Feature-engineered satellite imagery data into patches (ArcGIS), classified buildings in rural Colombia from pixel-level (CART, XGBoost, random forest), achieving 98% AUC (PyTorch)
- Integrated classification models to UNMAS global analytics team to evaluate effects of Colombian mine clearance project, providing insights into subsequent urban developments of Colombia

BLOOMBERG

Shanghai, China

Global Data 2021 Summer Intern

Summer 2021

- Crawled 100+ reports (Selenium), extracted key points and established a data repository in Bloomberg, transformed data with statistical correlations, visualized data to analyze macro & micro finance trends (Python)
- Developed product template with data mining on domestic policy research, presented product to senior management (40+ European & APAC team leads, managers) and used as Bloomberg prototype product

EBAY INC

Shanghai, China

Data Scientist Intern (Honor: Intern Top Performer 1/40+)

Spring 2021

- Led team of 2 interns to conduct clustering-based cohort analysis and regression-based incrementality analysis utilizing 200B 5-year user data to evaluate major promotion events effectiveness, resulting in 1.5% increase in user retention
- Designed 15+ business metrics to measure promotion impact, constructed dashboards and presented marketing strategies

NYU CENTER FOR DATA SCIENCE AND ARTIFICIAL INTELLIGENCE

Shanghai, China

Research Assistant to Professor Guodong Chen

2020 - 2021

- Conducted text analysis on 70M HSBC payment transactions, preprocessed features via word embeddings (NLTK)
- Segregated customers using text data on consumption behavior with Multinomial Naive Bayes & NN models, achieving 88% accuracy (PyTorch), introduced customer segmentation strategies to HSBC Data Science team

ADDITIONAL INFORMATION

- Volunteer: Researched Chinese female maternity policy & economic effects (2020), volunteer teacher for migrant children in China (2018-2019)
- Interests: amateur pianist, avid yogi, adrenaline junkie, figure skating learner