## **ERIC HU**

Queens, NY, 11101 | (718) 208-6170 | xh2007@nyu.edu

#### **EDUCATION**

#### New York University, College of Arts and Science

Bachelor of Arts in Honors Mathematics & Computer Science, minors in Business Studies & French GPA: 3.97/4.00

Honors/Awards: Presidential Honors Scholar; Math Honors Program; Dean's List (2020-2023)

Relevant Coursework: Data Science & Data-Driven Modeling, Partial Differential Equations, Numerical Analysis, Object Oriented Programming, Machine Learning & Computational Statistics, Time Series Analysis

#### **PROFESSIONAL EXPERIENCE**

#### Shanghai ZTCapital Management Co.,Ltd

Quantitative Analyst Intern (Remote)

- Developed multiprocessing algorithms for fast processing of high-frequency stock data (API downloading /cleaning/saving/reading), boosting average data processing speed by 500%
- Replicated and adapted 'Deep Learning in Building High-Frequency Factor Feature Engineering' study • from Haitong Securities to develop and implement a tailored portfolio optimization strategy

#### Applied Computational Social Sciences Data-Intensive Governance - PSL Institute **Paris**, France Mar. 2023 – May. 2023

Data Analyst Intern, Equipe de Data Scientists

- Employed NLP models (KeyBert/TF-IDF) for 3-year French Ads' data cleaning and keyword extraction •
- Designed algorithms to predict gender and identified trends of sexism in French Ads
- Visualized numerical data with Pyplot to compare thematic influences of economic journals and produced publish-level images

#### ACADEMIC EXPERIENCE

Transport of Heat/Acoustic Wave in Random Media with Green's Function Formalism New York, NY Advised by Prof. Stefano Martiniani | DURF Grant Recipient (\$950) Oct. 2023 – Present

- Established the equivalent of the scattering (Lippman- Schwinger) equation for transport problems in terms of Green's function
- Designing a numerical solver to compute the full response of the medium to external excitations, • characterizing the effect of structure on the medium's response

#### **Classical Quantile Regression and 1D Vector Quantile Regression**

Advised by Prof. Alfred Galichon | SURE Grant Recipient (\$3500)

- Constructed classical quantile regression and one-dimensional vector quantile regression, deducing • equivalence in computational results and linear programming formulation
- Presented findings at undergraduate symposium and compiled results into a 15-page report •

#### **Spotify Music Classification**

Machine Learning Capstone Project

- Built machine learning models based upon 45,000 songs from Spotify API •
- Classified 5,000 songs into 10 genres via 4 models (SVM/Neural Network/Random Forest/Adaboost)
- Evaluated model performances using ROC curve and achieving highest AUC score of 0.92/1.00

### **TECHNICAL SKILLS**

Computer	Python, Java, C++, SQL, MongoDB, Julia, Matlab
Languages	Fluent in English and Chinese, Conversant in French

**Paris/New York** 

Mar. 2023 – Oct. 2023

# New York, NY

Mar. 2022 – May. 2022

May 2024

Shanghai, China

Oct. 2023 - Present