HAOCHEN GU

South Kensington, London

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EDUCATION

Imperial College London, BS Mathematics with Statistics   2023 - 2026

- Year 1: 78.15%

High School Affiliated to Nanjing Normal University, International Baccalaureate DP   2020 - 2023

- 43/45   Global Top 3%

SKILLS

Python,**LaTeX**(proficient), **R**

EXPERIENCES

University of Science and Technology - Part-time Research Assistant   2024.11.01 - present

- Currently working on the project of machine learning for polymer structure discovery.

China Securities - Investment Banking Department   2024.07.01 - 2024.08.31

- Assist in preparing the bidding documents and prospectus for the bond-issuing company.

- Assist in organizing the financial data of the bond-issuing company.

RESEARCH

Analysis of the distribution of combined random variables using Fourier transform and characteristics functions: For my high school extended essay, I employed Fourier transforms to create a mathematical model assessing the risk-return relationship of a portfolio comprising Apple and Johnson & Johnson stocks. This effort was recognized with an 'A' grade, the highest evaluation from the International Baccalaureate Organization (IBO).

Spatio-Temporal Analysis of Drug Prime Nearby, Using Kernel Density Estimation: Based on kernel density estimation, a spatiotemporal point process model of drug crime distribution within the corresponding range was constructed, successfully identifying the peak periods and concentrated areas of drug crime in London.

AWARDS

- WorldQuant Challenge   GOLD LEVEL

OTHERS

Language :   Mandarin - Mother Tongue   English - Academic Language

Online Courses:

- Coursera - Stanford University & DeepLearning.AI Machine Learning Specialization

- Udemy - Data Science in Python: Data Prep & EDA

Personal Blog:

guhaochen.uk