

# Jinghong Zhang

Chicago, IL | +1 619-988-3319 | [jinghongzhang@uchicago.edu](mailto:jinghongzhang@uchicago.edu) | [LinkedIn](#) | [GitHub](#)

## EDUCATION

**The University of Chicago**

**Chicago, IL**

**Master of Science in Financial Mathematics**

**Expected December 2025**

- Courses: Probability and Stochastic Processes, Option Pricing, Python, Optional Pricing

**University of California San Diego**

**La Jolla, CA**

**Bachelor of Science in Mathematics – Computer Science | Bachelor of Art in Economics (GPA 3.94 / 4.0) June 2023**

- Courses: Probability Theory and Statistics, Data Structure and Algorithms, Real Analysis, Optimization, Calculus, Algebra, Time Series Analysis, Deep Learning, Game Theory, Macroeconomics, Microeconomics, Econometrics
- Awards: Magna Cum Laude (Top 6%); Provost Honors (2019-2023); Caledonian Society, Muir College (2021-2023)

## SKILLS

**Computing:** C++, Python, Jupyter, R, MATLAB, Java, Unix/Linux, Stata, Julia, ARM Assembly, C, LaTeX, Amazon AWS

**Knowledge:** Financial Markets, Machine Learning, Statistical Modeling, Data Analytics, Econometrics, Algorithm Design

**Languages:** Mandarin (native), Japanese (Intermediate)

## EXPERIENCE

**Invesco Ltd.**

**Hong Kong**

**Intern (Remote)**

**April 2024 – August 2024**

- Utilize traditional NLP methods to analyze sentiment of 23057 stock reports; train and apply deep learning large language model Chinese-BERT and Chinese-LLaMA to predict each stock performance after report was released

**Abio-X Holding Inc. (MLAB Biosciences)**

**Waltham, MA**

**Artificial Intelligence Intern**

**June 2022 - September 2023**

- Built zero-shot fitness prediction tools for protein sequences datasets across different domains by applying deep learning transformer-based protein language models such as TAPE, ESM-1v, and Progen with neural networks
- Built SOTA reinforcement learning algorithms to assist design of protein sequences, employing bandit and tree search.

**Tigress Financial Partners**

**New York, NY**

**Data Analytics Analyst Intern (Shanghai Office)**

**September 2020 - November 2020**

- Analyzed stock, such as by CAPM model, to calculate optimal portfolio and maximize Sharpe Ratio using Python
- Analyzed historical data of stock price to examine stock profitability and risk utilizing time series analysis

## RESEARCH

**China Europe International Business School (CEIBS)**

**Shanghai, China**

**Research Assistant**

**July 2021 - March 2022**

- Compared common text analysis methods such as sentiment dictionaries (LIWC and LM) and linguistic complexity (e.g. SMOG, Dale Chall) in management literature with samples of 5000 conference calls with Python and STATA
- Applied deep learning methods such as BERT to conduct sentiment analysis

**Aarhus University**

**Aarhus, Denmark**

**Research Assistant (Remote)**

**January 2021 - July 2021**

- Conducted structural content analysis of 573 articles from Automotive News to identify competitive actions

**Boston College**

**Chestnut Hill, MA**

**Consequences of Headquarters-Subsidiary Communication on Subsidiary Productivity July 2020 - September 2020**

- Examined how HQ-subsubsidiary communication affects productivity with opening of TGV line as exogenous shock
- Calculated physical distance between the TGV line and firms' headquarters and subsidiaries with C++, Python and R

## PUBLICATIONS

**Tree Search-Based Evolutionary Bandits for Protein Sequence Optimization [\[link\]](#)**

**AAAI 2024**

- Jiahao Qiu\*, Hui Yuan\*, **Jinghong Zhang\***, Huazheng Wang, Wentao Chen, Mengdi Wang
- Summary: To enhance protein engineering efficiency, we proposed a tree search-based bandit learning method, which expands a tree starting from initial sequence with guidance of bandit, pretrained embedding and deep learning models.