Mingyang (Ickle) Zhou

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EDUCATION

University of Michigan **Ann Arbor, MI**

Master of Science in Quantitative Finance and Risk Management *Sept. 2023- Dec.2024 (Expected)*

- Relevant Courses: Financial Math, Stochastic Process, Linear Programming, Statistics, Computer Science

Huaqiao University **Quanzhou, China**

Bachelor of Science in Mathematics and Applied Mathematics *Sept. 2019- Jun. 2023*

- GPA: 4.34/5.00; Class Ranking: 3/70
- Relevant Courses: Theory of Probability, Financial Engineering, Mathematical Statistics, Abstract Algebra, Complex-Variable Function, Securities Investment, Mathematical Analysis, Complex-Variable Function

WORK EXPERIENCE

CITIC Securities **Hangzhou, China**

Marketing Department Intern *Jul.2022- Aug.2022*

- Researched the financial reviews of the securities industry through financial annual reports of different securities companies.
- Presented the investigation report representing all interns.
- Collected, cleaned, and visualized financial data to propose a detailed summary through iFinD software.
- Conducted research on investment prospects with Account Manager and finished 5 products cases.
- Used the historical data of the past five years to fit the portfolio, resulting in a superior product report with both earnings and Sharpe Ratio.

PROJECT & RESEARCH EXPERIENCE

Research on High-Precision Numerical Algorithms or Nonlinear Schrödinger Equations

Project Core Member *Jun. 2021- Jun. 2022*

- Analyzed the heat equation in terms of conventional one-dimensional difference scheme method and the barycentric interpolation-CN scheme method.
- Used the barycentric interpolation collocation method to derive the semi-discrete numerical scheme of the one-dimensional Schrödinger Equations and obtained the error estimations for fully discrete schemes.
- Designed the programs of one-dimensional & two-dimensional Schrödinger Equations under barycentric interpolation-CN scheme method and conventional difference scheme method using MATLAB.
- Compared all the methods by performing relevant numerical arithmetic tests and compiled a final report.

Numerical Investigation of Nonlinear Schrödinger Equation Using Barycentric Interpolation Collocation Method

Project Member *Jun. 2021- Jun. 2022*

- Discretized the time derivative with the Crank-Nicolson scheme, brought barycentric interpolation functions into spatial discretization, and conducted a consistency analysis of the semi-discrete collocation scheme.
- Used Newton Iterative method to derive the corresponding linear algebraic equations and presented a collocation approach based on barycentric interpolation functions and finite difference formulation to facilitate the approximate solution of nonlinear Schrödinger Equations.

LEADERSHIP EXPERIENCE

Vice President of Huaqiao University Foreign Language Association *Sept.2019- Jun.2021*

- Organized 10 English Corner activities with different themes with 60-70 students every time.
- Created the 5 PowerPoint presentations, designed 2 proposals, and compiled the 2 copy writings.
- Spent 1 month to organize each of the following events (100-120 participating students): English Speech Contest, Spring Speech Contest, Movies Dubbing Contest, and English Words Reciting Daily Attendance Activity
- Recruited 441 new members cumulatively and coordinated the internal affairs.

SKILLS

- Technical Skills: MATLAB, R, Python (Pytorch)
- Languages: English (Fluent), Mandarin Chinese (Native)