Kenrick Raymond So

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Education

Ateneo de Manila University,

June 2024 - May 2025

Master in Applied Mathematics Major in Mathematical Finance

• Coursework: Stochastic Calculus I & II, Financial Risk Management I & II, Financial Derivatives I & II, Advanced Probability and Martingales

Ateneo de Manila University,

Aug 2020 - May 2024

BS Applied Mathematics with Specialization in Mathematical Finance

- GPA: 3.5/4.0, Cum Laude
- Awards: 85th percentile of cohort, won several inter-organizational competitions.
- Coursework: Partial Differential Equations, Ordinary Differential Equations, Scientific Computing I & II, Real Analysis, Advance Calculus, Time Series, Statistical Analysis, Financial Mathematics I & II

Experience

Graduate Assistant, Department of Mathematics – Ateneo de Manila University

June 2024 - May 2025

- Awarded a full tuition waiver plus stipend for the duration of my postgraduate studies
- Assisted the department of mathematics in organizing conferences, workshops, and seminars

Actuarial Valuation Intern, Willis Towers Watson – Philippines

June 2023 - Sept 2023

- Prepared several valuations of pension plans and retiree welfare plans through analyzing financial data to perform actuarial calculations that determine the present and future values of plan provisions
- Analyzed retirement benefit plans to determine the sustainability for employers through estimating future liabilities and assessing the impact of plan design changes

Projects

Uncertainty in Pricing and Risk Measurement of Survivor Contracts

Github

- Co-supervised by Dr. Len Patrick Garces and Dr. Jeric Briones
- My undergraduate thesis investigated the impact of the choice of mortality model and risk-neutral transformation in the valuation of survivor swaps as an instrument to hedge the risk that pensioners live longer than expected
- Formulated a risk-measurement framework to evaluate the risk metrics for the survivor swaps in line with Solvency II
- Methods Used: R, VaR, cVaR, Monte Carlo simulation, parametric time series, ordinary least squares

Numerical Solution to the Optimal Portfolio Selection Problem for Power Utility Function

Github

- Applied a numerical scheme that used central differencing to determine the optimal portfolio weights between a risky and a risk-free asset that maximizes the terminal wealth of an investor
- Methods Used: Python, finite differences, stochastic calculus, Hamilton-Jacobi-Bellman equation, algorithmic solving linear equations

Numerical Scheme for the Optimal Stopping Problem for Pairs Trading Under Jump Diffusion Dynamics on High-Frequency Data

Github

- Worked closely under the mentorship of Dr. Len Patrick Garces
- Applied numerical methods to determine the optimal exit strategy for a pairs trading portfolio that minimizes the risk of adverse losses under the assumption that the price process exhibits jumps
- Methods Used: R, finite differences, quadrature, free-boundary problem

Volunteering/Extracurricular

Vice President - AIESEC in Ateneo

Sept 2020 - Feb 2023

- As vice president, I handled the organization's budgeted expenses, revenue-generating initiatives, contracts, corporate sponsors, and training
- Streamlined reporting, documentation, and operations by creating templates in Word and Excel for financial statements, projects, and administrative functions
- Directed three merchandise-selling initiatives including brands such as HydroFlask, Champion, that generated P97,175.00, and a leadership training program that generated P28,150.00

Associate Vice President - Ateneo Consulting Club

Sept 2020 - Aug 2021

- Crafted and presented a report for local beverage startup that included market research, framework analysis, risk mitigation, and projected impact of their restructuring program
- Conceptualized and executed a program for a case competition with 80 participants

Other Details

Technologies: Python, R, HTML, LaTeX, Git

Languages: English (IELTS Band 8), Filipino (native), Mandarin (competent user)