

# Ti Wen (Steven) Chen

• s12342328@gmail.com • +886 987-758-670

## EDUCATION

<b>National Taiwan University</b> <i>Master of International Business, especially majoring in Financial Engineering</i>	<b>Sep. 2021 ~ Jun. 2023</b> <i>Taipei, Taiwan</i>
<b>National Taiwan University</b> <i>Bachelor of Chemical Engineering</i>	<b>Sep. 2013 ~ Jun. 2018</b> <i>Taipei, Taiwan</i>
<b>Relevant Topics</b> <b>Finance:</b> Behavioral Finance, Futures and Options, Financial Computation, Financial Engineering, Financial Management, Risk Management <b>Math and Stats:</b> Advanced Statistics, Econometrics, Optimization, Statistical Learning, Stochastic Processes <b>Computer and Data Science:</b> Machine Learning, Deep Learning, Reinforcement Learning <b>Leaderships:</b> Director of Valley22, Manager of Eside Bond <b>Honors:</b> Championship of 2022 Fidelity innovative financial technology challenge	

## SIDE PROJECTS

- Devised a Foster-Hart optimal momentum portfolio, which yielded a 63% win rate, 1.2 profit loss ratio and 68% more profitable than TSEC weighted index in ten years.
- Acquired knowledge of the Heston pricing model independently and implemented its closed-form solution, as well as the Finite Difference method, utilizing object-oriented programming principles in C++.
- Streamlined the corporate valuation process and financial index calculations using Python, resulting in a 60% reduction in time spent on corporate analysis.
- Scraped real-time bitcoin information and deployed automated Line notifications in response to 5% price fluctuations within a one-hour time frame.

## EXPERIENCE

<b>AI CUP House Price Prediction Competition</b> <i>Data Science Research</i>	<b>Sep. 2023 ~ Nov. 2023</b>
<ul style="list-style-type: none"><li>• Collected data on factors affecting house prices, performed data analysis, and determined the factors through feature engineering.</li><li>• Combined various statistical learning, machine learning, and deep learning models, showing a 8.3% MAPE on the private set.</li></ul>	
<b>Financial Computation</b> <i>Financial Engineering Research</i>	<b>Feb. 2022 ~ Jun. 2022</b> <i>Taipei, Taiwan</i>
<ul style="list-style-type: none"><li>• Learned Black-Scholes, Binomial tree model, Finite difference method and Monte Carlo simulation, etc. options pricing methods.</li><li>• Applied numerical methods to find implied volatility, modify accuracy of options value and solve partial differential equation.</li></ul>	
<b>SinoPac Securities</b> <i>Business Strategies Research Intern</i>	<b>Dec. 2021 ~ Jan. 2022</b> <i>Taipei, Taiwan</i>
<ul style="list-style-type: none"><li>• Conducted top-down analysis on brokerages business strategies in DMA, API and internet trading.</li><li>• Updated market share, conducted EDA on potential market trend and compared Taiwan and US investment banking spectrum.</li></ul>	
<b>Financial Statement Analysis and Corporate Valuation</b> <i>Equity Research</i>	<b>May. 2020 ~ Jul. 2020</b> <i>Taipei, Taiwan</i>
<ul style="list-style-type: none"><li>• Initialized a research report covering Momo.com Inc. (8454.TW) with in-depth research on Taiwan retail market.</li><li>• Applied DCF, PE ratio and PEG ratio valuation model for an implied share price with 23% upside potential.</li></ul>	

## ACTIVITIES

<b>Fidelity Innovative Financial Technology Challenge</b>	<b>Jan. 2022~Feb. 2022</b>
<ul style="list-style-type: none"><li>• Created a business model which analyzes individual consumption, calculates carbon emission and issues green credit.</li><li>• Ensured our feasibility with in-depth research on Ant group’s business model and the existence of green inflation.</li></ul>	

## ADDITIONAL INFORMATION

<b>Mandarin:</b> Native	<b>Hobbies:</b> Basketball
<b>English:</b> Proficient	• Lead team ranking 3 <sup>rd</sup> in NTU Basketball League