Yiwei WANG

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EDUCATION

Columbia University   *09/2022 – 02/2024*

Master of Arts in Mathematics in Finance

Zhongnan University of Economics and Law   *09/2018 – 06/2022*

Bachelor of Economics in Financial Engineering, GPA: 3.8/ 4.0   *1st Prize in Chinese Mathematics Competition 2019*

University of California, Berkeley   *07/2020 – 08/2020*

Summer School Program——Data Mining and Analysis (Merit)

PROFESSIONAL EXPERIENCE

Huifeng Industrial (Shanghai) Co., Ltd. *Intern Derivatives Trader Assistant*   *09/2021 – 11/2021*

- Wrote functions for pricing barrier option with Python through Monte Carlo.
- Updated corporate options quote daily, measured volatility of option subject matter on RStudio with GARCH.
- Calculated the profit and loss of each hedging on Excel.

Sinolink Securities *Intern Fund Operation Manager*   *07/2021 – 08/2021*

- Updated list of PE funds monitored for the day with Python, maintained regulatory database.
- Cooperated with different departments in reviewing and issuing each transfer of PE funds.
- Verified the validity of business and association information of fund companies.

TF Securities *Intern Account Manager*   *07/2019 – 09/2019*

- Re-constructed financial factors in research reports with Python through PyCharm.
- Visualized data with Python, analyzed market trend and stock trend, recommended financial products to clients.

RESEARCH EXPERIENCE

Option Pricing Research based on DeepLearning *University-level*   *06/2022*

- Constructed 4 different Neural Network Model to boost the efficiency and validate the advantages of 1D-CNN and LSTM with the help of TensorFlow.
- Through cross-validation and some statistical test boost robustness of the experiment.
- Through linear surrogate model to increase the interpretability of the LSTM and 1D-CNN option pricing model.

Fin-Tech Risk Sentiment Index Construction Based on Machine Learning *National-level*   *07/2020 – 09/2021*

- Collected structured data – BTC's trading volume, technical indicators of Fin-tech products like MACD.
- Crawled search volume data for keywords in Baidu with Python, cleaned data, conducted NLP.
- Aiming to establish a real-time index measuring the risk of trading Fin-tech products.

Application of Data Mining based on Business Intelligence in Telecommunications *University-level*   *12/2020*

- Conducted empirical customer churn analysis and forecasting with support vector machine.
- Constructed a list of users with high churn rate based on modeling, proposed a minimally feasible product feature based on user research and invite seed users to explore the new feature.

5G Business Analysis Competition *National-level*   *04/2020*

- Adopted PSETEL model in analyzing the advantages and disadvantages of corporate's 5G products.
- Conducted financial time series modeling with ARIMA-GARCH and Norton in R, adopted simulated annealing algorithm to obtain a model with a correlation factor of 0.9, provided strategic suggestions.

ACTIVITIES VOLUNTEER EXPERIENCE

Shameen Service Station, Guangzhou *Volunteering*   *07/2020 – 08/2020*

- Worked with fire station, provided refreshing drinks to firefighters, checked fire safety hazards in local community
- Introduced culture and history of Shameen, the old French Concession, to tourists

SKILLS&HOBBIES

- Programing: Python(option pricing function, factors construction, stock exchange strategies like Hurst, Moving Average, Turtle), Machine Learning, Deep Learning, TensorFlow (excellent at using tf.keras to implement RNN,CNN,LSTM,NLP, Picture classification), R(ARIMA, GARCH series model), MATLAB, SQL
- Hobby: Amateur Football Player. Has been selected to Guangzhou Youth team list.