

EDUCATION

University of Chicago, Chicago, IL

MS in Applied Data Science

Sep 2023 – Dec 2024

- Core Coursework: Data Mining Principles, Big Data Design, Time Series Analysis and Forecasting, Machine Learning and Predictive Analytics, Linear and Nonlinear Models for Business Application

University of Washington, Seattle, WA

BA in Mathematics(3.77 GPA)

Sep 2019 – Aug 2022

- Core Coursework: Machine Learning, Linear Algebra, Statistics, Optimization, Math Modelling, Real Analysis, Finite Markov Chains and Monte-Carlo Methods, Economics, Numerical Analysis, Programming for Quantitative Finance

EXPERIENCE

Investment Analyst | SGS Semiconductor Global Solutions | Shanghai, China

April 2023 – Sep 2023

- Wrote and analyzed Semiconductor industry(including materials, metals, packaging, and testing, etc.) research report for subsidiary company in parts of: 1)industry and market overview, 2)company profile, 3)products and technology, 4)business operations, 5)financial and future planning
- Wrote subsidiary companies' quarterly investment reports in parts of: 1)quarterly overview, 2)reports on invested projects, 3)planned incubation projects
- Researched Korean NCT(National Core Technology) limitations about dicing saw and thinning techniques
- Wrote analysis in topics of there are no barriers for Holding company to go public and provided with Holding company examples; also showed rules of declining of stocks for different people

Industry Analyst | Orient Securities | Shanghai, China

April 2023 – Sep 2023

- Organized meeting minutes with experts; collected and re-organized weekly news about automotive industry
- Wrote and analyzed automotive companies based on their annual report in parts of: 1)industry overview, 2)main products and industry status, 3)customers and partners, 4)production capacity and market expansion, 5)energy efficiency and environmental reservation, 6)research and development progress, 7)industry outlook and business plan, 8)financial/sales/revenue datasets
- Analyzed convertible bonds based on their convertible premium rate, pure debt premium rate, yield to maturity, and price
- Wrote companies analysis report based their annual report, financial report, and third party analysis

Industry Analyst | Guotai Junan Securities | Shanghai, China

Jan 2023 – April 2023

- Built different companies' financial valuation models by using excel based on companies total revenue(different products revenue), gross profit margin, products sale volume/price/market share, etc.
- Built PCS(Power Conversion System) database using excel from companies annual report, prospectus, and industry report
- Wrote microinverter, PCS, and PV ribbon industry research report, such as: 1)reasons to focus on PCS, 2)how does PCS work and classifications of PCS, 3)opportunities, patterns, and structure of PCS(analyzed from perspectives of installed capacity, different types of PCS, countries, shipments, different products from different companies)
- Wrote different microinverter companies analysis based on their histories, products, financial report, etc.

Data Analyst | Quant Investment | Shanghai, China

Sep 2022 – Jan 2023

- Analyzed financial datasets (trading dataset, position dataset, daily stock market dataset, etc.) and calculated daily/monthly profit for every account based on stocks each invested in mainly Python pandas and numpy
- Wrote automated program in order to abstract information on financial websites daily and produced into excel form by using Python web scraping(selenium, requests, BeautifulSoup)
- Visualized and analyzed datasets; report with different type of plots
- Searched for application of futures tick data and how it reflects the market

Research Assistant | University of Washington | Seattle, WA

April 2022 – Oct 2022

In topics of Ocean Dynamic under the supervision of Dr. Manucharyan | <https://deep.ocean.washington.edu/>

- Transferred ice concentration, sea ice velocity, ocean velocity, and atmospheric wind velocity into the Ease Grid by using Python; the original datasets are from year 1978 to 2021 based on NASIDC
- Made plots of ice concentration, ocean velocity, sea ice velocity and atmospheric winds in Ease Grid form for different years using cartopy, matplotlib, and seaborn in order to check if Ease Grid matches the original data
- Predicted the deep ocean activity(velocity) with interpolated datasets using linear regression and MLP regression by Python
- GitHub link: https://github.com/yyu6/Sea_Ice_Plots.git

RELEVANT PROJECTS

Optimization of Production for a small factory

Summer 2021

- Based on the analysis of financial data such as workers' salaries, raw material cost, and rent expenditure etc., optimized the production procedure and worked out optimal solutions for promotion strategy in July & September using Linear Programming with Python (pyscipopt and tabulate)

SKILLS & INTERESTS

Software: Python (pumpy, pandas, sklearn), MATLAB, Tableau, Julia, and R; SolidWorks; Latex, Markdown; Microsoft Software;

Language: Fluent in Mandarin and English