JIANGDA WANG

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EDUCATION

University of Illinois, Urbana Champaign

Master of Science in Financial Engineering August 2022 – December 2022

- **GPA: 4.0/4.0**
- Relevant Coursework: Financial Computing, Statistical methods, Machine Learning in Finance, CS for Quant, Algorithms

Shandong University

Bachelor of Economics in Insurance September 2018 – June 2022

- **Overall GPA: 3.8/4.0**

University of California Berkeley

Statistics (Extension Program) August 2019 – May 2020

- GPA: 3.6/4.0

SUMMARY

Actively participate in open-source community specifically in Julia Timeseries(TSFrame.jl) and Julia Machine Learning Organization(TableTransforms.jl) with strong self-taught ability and interest in discovering the beauty of big data.

PROFESSIONAL EXPERIENCES

Project: Machine Learning Methods for Vanilla Option Pricing and Volatility Fitting with JP Morgan, Chase

Group Member January 2023 – Now

- Generated European and American Option price using BSM, BBS, BBSR, Finite-Differential Method and Heston Model.
- Applied state-of-the-art machine learning method like: LightGBM, XGBoost, Artificial Neural Network to predict the price.
- Using Differential Evolution Optimizer to calibrate Heston parameters.

Github Project: Self-Contained Autograd Engine

Repository Address: Micrograds.jl: small autograd engine July 2022 – August2022

- Used Julia to write an autograd engine with forward and backward propagation functionalities that sustain type stability
- Applied topological sort algorithm to draw derivative graph and train small Neural Network model

CCF-BDCI: Personal Loan Default Forecast Competition September 2021 – November 2021

- Implemented data processing pipeline to clean the person loan dataset, using regular expression, date-resample, interpolation to deal with string values, numeric value and null value consecutively
- Used K-nearest neighbors algorithm to fill anonymous data, implemented target encoder on regional variables, and one-hot encoder on categorical variables to do feature engineering
- Performed transfer learning to fit Internet dataset to increase the sample size, built ML model using bootstrap aggregation to combine XGBoost and LightGBM model and the best score achieved top 10% rank

Founder Securities, Shenzhen, China

Intern of Financial Engineering Group June 2021 – August 2021

- Employed Pandas and NumPy library to calculate the evaluation indicators of CSI wine industry data and banking industry indexes, stocks, and futures data for the past 10-20 years
- Built a quant strategy based on technical indicators like LLT, ATR, and EWA, combined with timing strategies factors to determine the size and the way to open a position
- Performed vectorized backtesting; optimized strategies by performing parameter traversal; made heat map to test strategy's applicability and wrote research reports

Weihai Institute for Interdisciplinary Research, Weihai, China

Member of Faculty Research Group

Project: Impact of Export Status on Wage Growth Rate May 2021 – June 2021

- Cleaned and sifted the China Industrial Enterprise Database 1998-2013 by Stata and built a panel data model to empirically analyze the impact of export status on wage growth rate
- Used instrumental variable method to eliminate the endogeneity of the measurement model regarding the impact of export status on wage growth rate
- Performed 2SLS regression and fixed-effect method; conducted several test on the model and wrote a report to interpret the coefficients and further analyze their economic significance

PROFESSIONAL SKILLS

Technical Skills: Python (3 yrs.), Git (3 yrs.), Julia (2 yr.), C++(1 yr.), R, Excel, Word, PowerPoint

Qualification: FRM Level-1;

Online Certificate: Baruch C++ Programming for Financial Engineering: Distinction