Junyu Wang

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EDUCATION

NEW YORK UNIVERSITY **New York, NY**
M.S. in Mathematics in Finance *Expected – Dec. 2021*

- **Coursework**: OOP and data structure in Java, Monte Carlo simulation, interest rate models, dynamic asset pricing models, time series analysis

UNIVERSITY OF WISCONSIN – MADISON **Madison, WI**
M.A. in Mathematics *Sept. 2018 – May. 2020*

- **Coursework**: Multiple PhD courses in numerical methods in PDE and analysis of PDE; stochastic calculus, applied stochastic process in OR, Mathematical methods in data science
- **Award**: Exchange & Visiting International Student Academic Excellence Award

NANKAI UNIVERSITY **Tianjin, China**
B.S. in Mathematics and Applied Mathematics *Sept. 2015 – Jun. 2018*

- **Coursework**: Real analysis, abstract algebra, ODE, probability theory, actuarial model and life contingency, Black-Scholes formula

EXPERIENCE

Kaxy Tech LLC D/B/A Kaxy Network **Jersey City, NJ**
Founder, Owner and Developer *Jun. 2020 – Present*

- Developed the whole backend of the websites include https://spaproxies.io and https://kaxynetwork.com using Golang net/http, MongoDB, Redis, OAuth2, Google Recaptcha V3 and etc.
- Developed a system for users to fully control and monitor the Squid Proxy Server using Shell Script and Golang Gin Web Framework - https://documenter.getpostman.com/view/16611495/Tzm8Gbbm
- Developed a HTTP/HTTPS tunneling proxy system to mix multiple upstream residential proxy providers using Golang net/http - https://documenter.getpostman.com/view/16611495/TzzHnDf6

BANK OF CHINA INTERNATIONAL CO., LIMITED **Shanghai, China**
Quantitative Analyst Internship, Financial Derivatives Division *Jun. 2019 – Aug. 2019*

- Formulated machine learning and statistical models based on Chinese stock market data
- Constructed a trading strategy based on the MA strategy and B&B Indicator using Python
- The excess annualized return rate of the strategy on CSI 300 index can reach eight percent

PROJECT(S)

UNIVERSITY OF WISCONSIN – MADISON **Madison, WI**

Analysis of 2D Advection Equation and 2D Heat Equation with MPI (Fortran and MATLAB)

- Wrote Fortran code to solve 2D advection using the Lax–Friedrichs method
- Used MPI with Fortran to validate first-order convergence for heat equation

Analysis of Generalized Minimal Residual Method (MATLAB)

- Conducted tutorials for classmates to understand the Krylov subspace, Arnoldi iteration and GMRES
- Implemented the algorithm and tested its convergence rate using MATLAB

Application of Lasso Regression using soft thresholding (Julia)

- Illustrated detailed Mathematical deduction and proof for the method
- Implemented the algorithm for a meteorological model using Julia

COMPUTATIONAL SKILLS/OTHER

Programming Languages: Golang, Python, Java, HTML, CSS, JavaScript, Shell Script, MATLAB

Other Software: Visual Studio Code, Mathematica

Languages: Mandarin (native), English (fluent)