# ZIYUE WANG

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# Industry Experience

GOOGLE Seattle, USA

Software Engineer, Core ML Engineering Productivity Team

May 22 - Now

- $\bullet$  Conducted research and built end-to-end models to rank important tests given a code change and reduced the rollback rate by more than 20% in certain projects
- Built service in Golang for users to query the model in a timely fashion
- Built a new Python code indexing tool to parse Google-wise code based on Abstract Syntax Tree

BNP Paribas CIB

New York City, USA

Algorithmic Quant Researcher, Electronic Equity Group

Mar 21 - Apr 22

- Processed trillions of order book data and built level 2 limit order book data using C++ (STL, Boost)
- Built short-term alpha signal with CNN, attention and LSTM models using Tensorflow, Pandas and Numpy and improved current signal performance by 20% with 50% less computational time
- Processed billions of records of order book and trade data in multi-thread using kdb+/q with functional-oriented design and fed them into deep learning model in streaming version

#### AIGEN INVESTMENT MANAGEMENT

New York City, USA

Quantitative Research Intern, Quantitative Research Division

Jun 20 - Aug 20

• Parsed five types of portfolio financing emails and cleaned ten years of security lending data from five different brokers using Python (smtplib, email, re) with detailed documentation for alpha research

#### OTHER EXPERIENCE

### Writing and Side Projects

*Arp 21 - Now* 

- Implementing PPO from scratch in Proceen environment
- Replicating Scaling Laws by using MNIST data
- Replicating Decoder-only Transformer
- Find the induction heads in GPT-2
- How to get gold medal in Kaggle competition
- Winner of 9<sup>th</sup> annual International Association for Quantitative Finance Competition, *Paper*

# Kaggle Data Science Competition Master, Top 0.2% Worldwide

Jan 21 - May 22

- G2Net Gravitational Wave Detection, 3/1219 (0.2%). Applied signal and image processing technique and built novel 1D CNN model using Pytorch to detect whether GW exists in the time series data; Github
- Tensorflow Underwater Starfish Detection, 11/2025 (0.5%). Applied YOLOv5 model to detect underwater small object and enhanced model performance with pseudo labeling, ensemble learning and tracking *Post*
- Jane Street Market Prediction, 84/4245 (1.9%). Deciphered 130 anonymous features and applied DenseNet, XGBoost and Autoencoder to predict stock short-term future return

#### **EDUCATION**

# BARUCH COLLEGE, CITY UNIVERSITY OF NEW YORK MSc in Financial Engineering, GPA 3.79 New York, USA Aug 19 - Dec 20

#### RENMIN UNIVERSITY OF CHINA

Beijing, CHN

BSc in Applied Mathematics; BEcon in Financial Engineering, GPA 3.78 (3/52)

Sep 15 - Jun 19

## Honors & Certifications

Ercolano Prize for the best student of the 2020 Baruch MFE cohort	Dec 21
Reinforcement Learning Specialization & Deep Learning Specialization, Coursera	Dec~20
Advanced C++11/C++14 and Multidisciplinary Applications Certificate with Distinction, QuantNet	Mar~19
Honorable Winner, US Mathematical Contest in Modeling, COMAP	May 18

# Programming & Activities & Interests

Language: Python, Go, C++, Kdb/q+, SQL, Unix Shell, Git, LATEX

DL Frameworks: Pytorch, JAX/Flax, TensorFlow, Keras

Leadership: President, Business and Finance Career Development Club, RUC

Interests: Rock Climbing (V8), Hiking and Reading