

# YICHENG WANG

[yw1273@nyu.edu](mailto:yw1273@nyu.edu) | (206) 601-5144 | <https://www.linkedin.com/in/wangy8989> | <https://wangy8989.github.io/>

## EDUCATION

### NEW YORK UNIVERSITY, TANDON SCHOOL OF ENGINEERING

Brooklyn, NY  
09/17 - 05/19

M.S. in Financial Engineering

GPA: 3.7/4.0 with *Scholarship*

Coursework: Asset Pricing & Risk Management, Derivatives Pricing, Valuation for Financial Engineering, Stochastic Calculus, Active Portfolio Management, Fixed Income Trading, Quantitative Trading Strategy, Machine Learning

### UNIVERSITY OF WASHINGTON IN SEATTLE

Seattle, WA  
09/13 - 06/17

B.S. in Economics & Applied and Computational Mathematical Sciences

GPA: 3.7/4.0 with *Honors in Economics*

Coursework: Corporate Finance, Managerial and Financial accounting, Econometrics, Statistics, Linear & Nonlinear Optimization

## TECHNICAL SKILLS / CERTIFICATIONS

- Certifications: CFA Level II Candidate, Bloomberg Market Concepts, SQL Summer Camp (Kaggle 2019), Credit Risk Modeling in Python (DataCamp), 2017 UW Economics Honors Outstanding Paper, Certificate in Quantitative Managerial Economics
- Skills: Excel, VBA, PowerPoint, Tableau, Bloomberg, Python, SQL, C/C++, R, Linux shell script, LaTeX, Git, AWS
- Libraries: Numpy, Scipy, Pandas, SciKit, TensorFlow, Keras, Spacy, Urllib, SQLAlchemy, Flask, BigQuery, Socket, Boto3

## EXPERIENCE

### KKL SOLUTIONS LLC

New York City, NY

*Data Analyst Intern*

10/19 – current

- Scrapped text from job descriptions on LinkedIn and Indeed job searches; Conducted text mining to indicate the keywords for job positions using Spacy; Wrote PowerPoint with data visualization using WordCloud in Python and Histogram in Tableau;
- Using various machine learning models to predict company bankruptcy, based on 64 financial attributes;

### TAURUS.AI

Beijing, China

*Algorithmic Trading Intern*

06/18 – 08/18

Cryptocurrency Trading

- Researched algorithmic trading strategies for cryptocurrency; used BotVS backtesting platform and provided API to backtest locally; did risk analysis and wrote local backtest performance visualization tool in Python; Produced report using Markdown;
- Real trade cryptocurrency pairs on Huobi and daily monitor several trading strategies on Judo backend server through SSH;
- Bollinger Band strategy on IOTA/ETH achieved a monthly return of 12% estimated from one-week real trading;

Fixed Income Trading

- Constructed cointegrated weighted spreads of Treasuries by CCA using train set; used AR(1) model to fit and forecast spreads;
- Optimized the chosen signal quality metrics by tuning parameters of predicted signals using validation set;
- Performed signal quality analysis using chosen metrics for test set and observed some quarters perform better than others;

### TREXQUANT INVESTMENT LP

Stamford, CT

*Global Alpha Research Intern*

01/18 – 06/18

- Developed market-neutral, medium-frequency Alphas using cross-sectional or time series operations on selected fundamentals by investigating academic research in factor investing; Then implemented them on company's back-testing platform Trexism;
- Produced high quality reports on accruals, dividend yields, industry factors, quality factors for share in internal forum;

## RESEARCH / ACADEMIC PROJECT

*Pairs Trading with Machine Learning on Distributed Python Platform, Capstone Project*

01/19 – 05/19

- Implemented a distributed Python platform that could be used to test a quant models for trading financial instruments in a network setting under client/server infrastructure; Produced detailed 50-page report using LaTeX;
- Set market data retrieval using Unicorn data feed and parse market data in json format; stored market data in ite3 database;
- Implemented trading logic: Bollinger Band pairs trading strategy with clustering achieved 2.5 Sharpe ratio backtested in 2018;
- Set up Python Client/Server communication and multi-threading and implemented real-time feed to simulate real trade; displayed trading analysis and P&L on web dashboard using Flask;

*Corporate Capital Budgeting Decisions including Real Options, Valuation Course Case Study*

11/18 – 12/18

- Modelled the cash flow using arithmetic random walk with limited liability option; calculated the value of future cash flows and limited liability option, and the value of equity of firm;
- Built an Excel spreadsheet-based tool to determine the optimal capital structure for a company with ABM cash flows in discrete time assuming the corporate tax rate, interest, and the cost of financial distress;
- Prepared graphs to illustrate the sensitivity of the optimal debt coupon to the selection of each parameter using VBA;
- Determined the optimal capital structure including a covenant that requires that the firm be liquidated once cash flow reaches 0, rather than the optimal level.

*Option Pricing Library, Python Course Project*

04/18 - 05/18

- Equity Option Pricing package with Git version control that calculates European/American/Asian Call/Put and exotic options.