

KEVIN J. WU
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EDUCATION

COLUMBIA UNIVERSITY

Master of Science in Computer Science (Machine Learning track)

Relevant coursework: Artificial Intelligence, Algorithms, Operating Systems, Cryptography.

New York, NY
Aug 2017 – Dec 2018 (expected)

HARVARD UNIVERSITY

Bachelor of Arts in Applied Mathematics and Economics, magna cum laude

Relevant coursework: Machine Learning, Quantitative Finance, Capital Markets, Probability Theory, Game Theory. *GPA:* 3.62.

Cambridge, MA
Sep 2010 – May 2014

TECHNICAL SKILLS

Programming Languages: Python, R, C#, C/C++, Java, SQL.

Databases and Platforms: MongoDB, PostgreSQL, SQL Server, Linux, AWS, Hadoop.

Python frameworks: Pandas, NumPy, Scikit-learn, NLTK, Keras, Tensorflow, Flask.

PROFESSIONAL EXPERIENCE

PRATTLE ANALYTICS

Quantitative Developer

- Used natural language processing techniques to analyze the sentiment of central bank and corporate communications.
- Led research and development on a new, alpha-generating sentiment dataset for publicly-traded companies in the US.
- Designed and wrote ETL pipelines using Python for processing data from third-party vendors and storing the results in MongoDB. Worked with lead quant to design a relational database schema and migrate existing data to PostgreSQL.

New York, NY
Apr 2016 – Aug 2017

BELVEDERE TRADING

Quantitative Analyst

- Used Excel and R to backtest new trading signals based on the pricing of related future and stock securities. Worked with traders to evaluate the performance of the new indicators and make adjustments to the model as needed.
- Wrote C# application to predict correlations between futures with different expiration dates, using historical price returns. Used SQL Server to design and implement a new database schema for storing historical and predicted values.

Chicago, IL
Aug 2015 – Mar 2016

Hybrid Trader Trainee/Software Developer

- (*software developer*) Wrote MapReduce procedures in Java to track the profitability of automated trading strategies and to compute intra-day correlations and variance of futures prices using high frequency market data.
- (*trader trainee*) Presented daily market summaries and trade recommendations to the team; completed an internal training program on options theory and market-making through classes and trading simulations.

Jul 2014 – Jul 2015

DEUTSCHE BANK AG

Global Markets Summer Analyst

- Sent out write-ups summarizing key research pieces for salespeople on the International Equity Sales team and their clients.
- Used principal component analysis to analyze portfolio risk for the Municipal Bonds/Derivatives trading desk.

New York, NY
Jun 2013 – Aug 2013

PROJECTS AND RESEARCH

Understanding “FedSpeak”: Identifying the Sources of Market Sentiment in Central Bank Communications

Undergraduate thesis, presented to the Harvard University Department of Applied Mathematics

Apr 1, 2014

- Used machine learning and natural language processing libraries in Python to identify potentially market-moving words and phrases in Federal Reserve statements.

Udacity Self-Driving Car Nanodegree Program

Terms: Computer Vision (completed); Sensor Fusion, Localization, and Control (completed); Deep Learning (in progress).

Nov 2016 – present

- Trained a convolutional neural network for autonomous car steering using Tensorflow and Keras.
- Implemented an Unscented Kalman Filter in C++ to perform object detection in self-driving cars.