

KEVIN J. WU
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EDUCATION

COLUMBIA UNIVERSITY

Master of Science in Computer Science

Specialization: Machine Learning. *Relevant coursework:* Machine Learning, Reinforcement Learning, Operating Systems.

New York, NY

Sep 2017 – Dec 2018 (expected)

HARVARD UNIVERSITY

Bachelor of Arts in Applied Mathematics, cum laude

Specialization: Economics. *Overall GPA:* 3.62.

Relevant coursework: Data Science, Quantitative Finance, Capital Markets, Probability Theory, Game Theory.

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

New York, NY

Apr 2016 – Aug 2017

- 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 in Python to process third-party data and store the results in MongoDB.
- Worked with project lead to design a relational database schema and migrate existing data to PostgreSQL.

BELVEDERE TRADING

Quantitative Analyst

Chicago, IL

Aug 2015 – Mar 2016

- 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.

Hybrid Trader Trainee/Software Developer

Jul 2014 – Jul 2015

- Wrote MapReduce procedures in Java to track the profitability of automated trading strategies and compute intra-day correlations and variance of futures prices using high frequency market data.
- Presented daily market summaries and trade recommendations to the equity index options trading desk.
- Completed an internal training program on options theory and market-making that included classes and trading simulations.

DEUTSCHE BANK AG

Global Markets Summer Analyst

New York, NY

Jun 2013 – Aug 2013

- Wrote and distributed summaries of key research pieces for salespeople on the Equity Sales team and their clients.
- Used principal component analysis to analyze portfolio risk for the Municipal Bonds/Derivatives trading desk.

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

Nov 2016 – present

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

- 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.