### **FDUCATION**

UNIVERSITY OF PENNSYLVANIA | Jerome Fisher Program in Management and Technology

Bachelor of Science in Engineering, Major in Computer Science, Minor in Math

Bachelor of Science in Economics, Concentrations in Finance and Statistics

Expected May 2018 | Philadelphia, PA

Cum. GPA: 3.74 (Dean's List: 2014-2015, 2015-2016)

#### TECHNOLOGIES AND COURSEWORK

#### **RELEVANT COURSEWORK**

Computer Science

• Data Structures/Algorithms, Computer Architecture, Software Engineering, Machine Learning, Data Mining, Scalable and Cloud Computing, Operating Systems

#### Math

- Linear Algebra, Discrete Math, Probability, Multivariable Calculus Business
- Management of Technology, Mathematical Modeling in Finance

### **TECHNICAL SKILLS**

Proficient:

- Java, Python, Javascript, HTML, CSS Familiar:
- MATLAB, R

Technologies and Frameworks:

• React/Flux, d3, Tornado, django, numpy, tensorflow, theano

#### **EXPERIENCE**

# AKUNA CAPITAL | Software Engineering Intern: June 2016 - August 2016 (Chicago, IL)

- Creating interactive data visualizations for traders and managers using React and d3 on the front end
- Writing server code for managing data using the Tornado IOLoop to create asynchronous python methods
- Using numpy and pandas to compute trading model parameters efficiently (achieved a 10x speedup in computation time)

# CIS 121: DATA STRUCTURES/ALGORITHMS | Teaching Assistant: December 2015 - Present (Philadelphia, PA)

- Course material includes basic data structures (trees, heaps, graphs, etc.), algorithm design, and implementation in Java
- Help write homework, hold office hours and review sessions, grade exams and assignments

## CB INSIGHTS | Summer Research Intern: May 2015 - August 2015 (New York, NY)

- Created data-driven industry reports on startup technology companies
- Analyzed investment patterns and market disruption using private company financing database in the following verticals: payment processing, cyber security, and human resources software

# OPEN DEEP | Open Source Contributor: April 2015 - September 2015 (San Francisco, CA)

• Implemented variants on the recurrent neural network model in the ano library of Python as an open source contributor: https://github.com/vitruvianscience/OpenDeep

#### PROJECTS AND CAMPUS INVOLVEMENT

#### TWITTER DEEP LEARNING

• Implemented and trained 3 deep learning algorithms for classifying twitter data by sentiment on a dataset of 1.5 million tweets, reaching greater than 85% accuracy: https://github.com/amitvpatel06/Twitter-Deep-Learning

## CS 224D | STANFORD UNIVERSITY

• Completed course work and problem sets for Stanford's deep learning class on the application of deep learning to Natural Language Processing:https://github.com/amitvpatel06/CS-224d

## CATHFIT SURGERY | CIS 350: SOFTWARE ENGINEERING

• Designed and implemented a webapp in Django to assist Penn hospital surgeons with picking correct catheters

# WHARTON INVESTMENT AND TRADING GROUP | TRADING TEAM HEAD

- Head a team responsible for the infrastructure and execution algorithms of an automated trading system
- Created a PostgreSQL database and API to hold market/fundamental data using Django's ORM
- Developing a transaction costs analysis framework to make trading implementation decisions

### PENNAPPS ACCELERATOR | BOARD MEMBER

- Run accelerator program backed by PennApps, mentor startups in product development, and strategy
- Organize joint pitch day with accelerators at Columbia, Harvard, and Princeton (intercollegiate.co)