

## Data Engineer

### Data Engineer - Valravn Capital

San Francisco, CA

Work Experience

#### Data Engineer

Valravn Capital - San Francisco, CA

November 2018 to Present

- Contributed to development of cloud-based quantitative modeling platform utilized by students in the UC Berkeley Haas School of Business Masters in Financial Engineering program
- Responsible for designing and deploying systems that automate and streamline data governance, operations and processes across multiple environments
- Developed ingestion pipelines and data analysis systems for use in developing algorithmic trading models

#### Quantitative Researcher

Quantitative Modeling and Prediction of Cryptocurrencies - Durham, NC

January 2018 to May 2018

Researched various approaches used in predictive modeling for financial assets, including autoregressive models, Bayesian regression and recurrent neural networks, and applied these techniques to the cryptocurrency markets

#### Data Visualization Software Developer

Duke Basketball Data Visualization - Durham, NC

September 2017 to May 2018

Developed a web application that exploits SportVU motion-tracking data to compute advanced shooting metrics of players and visualizes their performance on the court

#### Equity Trading Software Development Intern

Deutsche Bank - Cary, NC

June 2017 to August 2017

Designed and implemented a machine learning and natural language processing engine for use in equity trading research

. Utilized engine in development of stock market sentiment analysis tool that would allow traders to extract quantitative insights from free-form text

. Presented a proof-of-concept of the tool to senior management to justify the value of machine learning and deep analytics to the bank

#### Technical Pre-Sales Strategy Intern

Intel Corporation - Santa Clara, CA

May 2015 to December 2015

Produced quarterly data analysis report focused on competitive landscape of microprocessor industry to be used by ~1K

sales employees for product positioning and worldwide customer communications

. Delivered biweekly reports to field sales employees highlighting Intel's competitive positioning for entire client product

portfolio across a range of processing capabilities as measured by industry-standard benchmarks

. Extracted quantitative data insights to produce detailed proof points that influenced sales strategy decisions

#### Behavioral Economics Research Assistant

Center for Advanced Hindsight - Durham, NC

August 2013 to May 2014

Researched behavioral economics under mentorship of renowned Duke Economics professor Dan Ariely and fellow Troy Campbell

. Designed experiments, surveyed participants and analyzed data for studies focused on the psychology of consumer purchasing habits

#### Projects

Neural Network and Classification Model Berkeley, CA

Artificial Intelligence Student August 2018

. Built neural network from scratch and used it to implement an image classifier as part of coursework in Artificial Intelligence course at UC Berkeley

#### Education

Bachelor of Science in Computer Science

Duke University

August 2018

in Visiting Computer Science Student

University of California, Berkeley Berkeley, CA

#### Skills

DATA VISUALIZATION (Less than 1 year), VISUALIZATION (Less than 1 year), ASSEMBLY(Less than 1 year), AWS (Less than 1 year), C++ (Less than 1 year)

#### Additional Information

##### Relevant Skills

Programming languages: Python Java JavaScript SQL C C++ Go Assembly

Libraries/Frameworks: Pandas Keras spaCy NumPy D3 Django Flask Tensorflow Angular React

Node

Technical Knowledge: Agile Development Git Machine Learning Data Visualization Relational Database Design AWS