M.S.E. IN COMPUTER AND INFORMATION SCIENCE & DATA SCIENCE

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EDUCATION

Philadelphia, PA Aug 2019 - May 2022 Aug 2019 - May 2022

University of Pennsylvania

Master of Science in Engineering, Data Science

Master of Science in Engineering, Computer and Information Science

- Courses: Algorithms & Computation, Big Data Analytics, Machine Learning, Deep Learning, Artificial Intelligence, Computer Vision, Computational Linguistics, Time Series Forecasting, Software Foundations
- · Leadership: Data Science General Assembly, Penn Data Science Group Board

New York, NY

New York University

Aug 2013 - May 2017 Aug 2013 - May 2017 Bachelor of Arts, Mathematics Bachelor of Arts, Economics

- · Courses: Linear Algebra, Probability, Statistics, Econometrics, Differential Equations, Numerical Analysis
- · Honors and Awards: Dean's List, University Honors Scholar (Founders' Day Award)

SKILLS

Programming

Python (PyTorch, Scikit-Learn, NumPy, Pandas, Matplotlib), C++/C, Scala, Java, R

Technologies

SQL, Apache Spark, AWS, Azure Databricks, Git, Docker, Power BI, LATEX

Others

Actuarial Exams: SOA Exam P/CAS Exam 1, Languages: Mandarin Chinese, Video: Final Cut Pro, HitFilm

WORK EXPERIENCE

Chicago, IL Jan 2021 - Present

William Blair & Company, L.L.C.

Data Science Intern

- Built a data pipeline in Databricks with Python to extract data from different data sources using a combination of Salesforce API and Microsoft Graph API to create data views to be used in Power BI
- Design a network graph and use centrality algorithms to identify effective relationships between bankers and clients

Boulder, CO

The Trade Desk, Inc.

Jun 2020 - Aug 2020

Data Science Intern

- Developed a new lookalike modeling feature with Spark and Scala in AWS; this long-awaited function allowed users to customize inputs to the ad campaign optimization algorithm
- Analyzed 10⁸+ rows of unexplored ad group data in Vertica SQL and prototyped a custom multi-target linear regression model to support recommender system with Python; this began as an ambiguous project that was driven to completion and launched company-wide, resulting in 74% increase in ad group performance

New York, NY

Vitech Systems Group, Inc.

Jun 2018 - Jul 2019 Jun 2017 - May 2018 Solutions Analyst

Associate Solutions Analyst

- Collaborated with tech leads to design extensive workflow processes and write new software design documents, advanced functional specifications, and enhancement contracts
- Self taught PL/SQL and worked with engineers to write and maintain SQL scripts for extracting reoccurring test cases, cutting down regression testing time by 25%

New York, NY

Haver Analytics, Inc.

Sep 2016 - May 2017 | Economic Research Intern

- Compiled, managed, and quality-assured databases covering macroeconomic indicators of Asia-Pacific markets and delivered data upon each release to clients with DOS
- Added new time-series data to databases and automated data extraction and formatting with DOS

SELECT PROJECTS

Jan 2020 - May 2020

Generating News Headlines Using Deep Learning Abstractive Summarization [paper] [code] [blog]

- Trained a Seq2Seq network in Pytorch on 200,000 news articles to generate summary headlines
- Improved the network with attention mechanism, teacher forcing, and a pointer-generator; achieved BLEU score of 0.075, outperforming results from main reference paper from 2015 by 0.065

Jan 2020 - May 2020

Artificial Anime Character Design Using Generative Adversarial Networks [paper] [code] [blog]

• Implemented generative adversarial networks in Pytorch with improved training techniques (trained on 21,000 images) to generate artificial anime character designs