Nathan DePiero

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EDUCATION

Brown University — Sep. 2024 – Expected May 2025
Sc.M Computer Science (GPA 4.0) — *Providence, RI*

Brown University — Jan. 2021 – May 2024
Sc.B Computer Science - Economics (GPA 3.8) — *Providence, RI*
- *Relevant Coursework:* Computer Systems, Data Science, Deep Learning, Database Management Systems

EXPERIENCE

INMTEL — Jun. 2024 – Oct. 2024
Data Engineer Intern — *Remote*
- Created data pipeline to convert web-scraping data into consistent format for input into language model workflow
- Compiled and documented metadata on global news sites for web-scraping automation
- Remodeled React website to be more concise and better align with the company's branding

1010Data — Jun. 2023 – Aug. 2023
Data Integrity Intern — *New York, NY*
- Repurposed data quality system for retail service to work for finance service. Worked with stakeholders from both services to understand differences in data attributes and how the system needs to be altered to account for them
- Modified algorithm that generates data quality checks, optimizing and adapting it to finance data
- Implemented automated, reoccurring data quality checks for 4 key consumer-facing finance datasets (25 tables)

Shay Capital — Jun. 2022 – Aug. 2022
Analyst Intern — *New York, NY*
- Developed a risk management application that extracts and analyzes trading data from the corporate portfolio management system. Reduced time that manager spent weekly compiling reports from 3 hours to 5 minutes
- Created repeatable analysis of daily broker margin data for CFO in Microsoft Excel to optimize capital efficiency

PROJECTS

Self-supervised Learning on Flight Data | *Python, Pytorch*
- Applied self-supervised learning techniques to a new domain, flight time series. Used a contrastive learning framework (SIMCLR) to generate latent representations of flight data for use in various downstream tasks.

Earnings Predictor | *Python, Pytorch*
- Developed model in Pytorch that takes in previous earnings performance along with stock metadata and outputs a continuous value that indicates the magnitude of the earnings beat or miss against analyst predictions.

Food Segmenter and Classifier | *Python, Pytorch*
- Developed ensemble model that segments different food on a plate using Meta Segment Anything model and classifies each segment with a fine-tuned Inception Resnet V2 model made with Tensorflow.

EXTRACURRICULARS

CS1470 Deep Learning - *Teaching Assistant* — Jan. 2025 – May 2025

Brown Derivatives Investment Group - *Chief Investment Officer* — Jan. 2023 – Present
- Manage club portfolio, trading a variety of derivatives on Think or Swim platform
- Built club website using Next.js, saving $260 a year

Brown Varsity Swimming and Diving - *Athlete* — Jan. 2021 – Feb. 2024
- School record holder in 400 medley relay, top 5 all-time performer in 100 butterfly, top 10 in 100 freestyle
- Participated in multiple Swim Across America fundraisers benefiting cancer research

SKILLS AND INTERESTS

Programming Languages: Python, Java, Typescript, Javascript, C, Go, HTML, CSS, SQL, Stata, R
Interests: Food/cooking, poker, soccer, tennis, movies, music, slacklining, running