

Nathan DePiero

nathandepiero.vercel.app

EDUCATION

Brown University

Providence, RI

Sc.M. in Computer Science (GPA: 4.0)

Sep. 2024 – Expected May 2025

- *Relevant Coursework:* Database Management Systems, Self-Supervised Learning, Analysis of Algorithms

Sc.B. in Computer Science - Economics (GPA: 3.8)

Jan. 2021 – May 2024

- *Relevant Coursework:* Computer Systems, Data Science, Deep Learning, NLP, Game Theory, Statistical Inference

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 prediction of the result of the next earnings as a continuous value, indicating the magnitude of the beat or miss .

TravelText | *Typescript, Next.js, Node.js, MongoDB*

- Made website to provide inspiration for travel activities. Allows for location nodes to be placed on a map, and links to be created between the nodes to represent an activity. I used Next.js and Node.js, with a MongoDB database.

EXTRACURRICULARS

CS1470 Deep Learning - *Teaching Assistant*

Jan. 2025 – May 2025

- Created and teaching workshops on self-supervised learning and prompt engineering

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