# Nathan DePiero

# nathandepiero.vercel.app

## 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

New York, NY Analyst Intern

- 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