Aryan Shetty

as17388@nyu.edu
858-888-2139

aryanshetty711.github.io

Education

New York University - Courant Institute of Mathematical Sciences / New York, NY — Sep 2022 - *May 2025*
Masters in Computer Science — GPA: 3.6
- Deep Learning, Natural Language Processing, Fundamental Algorithms, Predictive Analytics, Computer Vision

Texas A&M University / College Station, TX — *May 2022*
BS in Computer Science, Minor in Economics - Magna Cum Laude — GPA: 3.8
- Data Structures, Discrete Math, Recommender Systems, Machine Learning, Parallel Computing

Experience

OpenAds | *Machine Learning Engineer* — New York, NY
Jun 2023 - Present
- Built a **commercial relevance classifier** for over **200k+** user searches to inform a recommendation system that matched searches with relevant advertisers with **92% accuracy**. Led machine learning initiatives to **reduce cost per action by 10%** at a fast moving startup.
- Designed, built, and fine-tuned a novel scalable model (hosted on AWS) that powered a generative ad agency. Work was demoed at **AWS' AI accelerator**, contributing to successful fundraising efforts and client acquisition
- Evaluated emerging large language model **academic research** — (StepBack, AutoPoison, HyDE) with new industry tools (Pinecone, GPTs) to continuously update a state of the art model via **Amazon Sagemaker**. Tested **Hugging Face** resources to finetune ad generation

CIMS | *Research Assistant* — New York, NY
New York, NY — *Aug 2023 – Jan 2024*

- Implementing **natural language understanding** methods to evaluate a large **language model's** ability for abstraction and reasoning in generating creative text and evaluating results against similar human text as sourced from r/writingprompts on Reddit
- Researching novel text evaluation metrics to measure abstraction, topic understanding, perplexity, and semantic burstiness under Dr Saining Xie

Highlight | *Performance Optimization Intern* — Seattle, WA (Remote)
Aug 2021 – Oct 2021
- Designed and implemented a model to grow client acquisition using a demographics based approach via **Python, Numpy, and Tensorflow** that generated a **40% increase** in client engagement
- Developed lead generation scripts via **BeautifulSoup/Scrapy** and automated outreach campaigns via **Apollo**

Data Lab @ TAMU | *Research Assistant* — College Station, TX (Remote)
May 2021 – Oct 2021
- Extended functionality of an anomaly detection platform by implementing models in **Python.** Incorporated primitives for testing algorithms such as **Isolation Forest, Telemanom, Variational Autoencoder** for 0 loss in **accuracy**
- Integrated models via **Keras,** enabling autonomous optimal model selection based on use case data

Citrix Systems | *Software Engineer Intern* — Dubai, UAE
May 2019 - Aug 2019
- Developed a **C++** app that provided end to end automation for generating sales documentation, reduced instance processing time by **90%** saving the company over **3 hrs/week**
- Wrote **SQL** queries that used user input to search **Azure** database

Core Competencies

Programming Languages: Python, C++, Javascript, TypeScript, SQL, CUDA, Java, C, HTML/CSS, Swift
Data and ML: PyTorch, Numpy, Keras, Sklearn, Pandas, Hadoop, Tensorflow, Apache Spark, Sagemaker, Langchain
Frameworks: AWS, NodeJS, React, Express, MongoDB, Postgre, Django, Jupyter, Git, Google Data Studio, Pinecone

Projects

Contextual Textual Argument Detection Model - Dr Adam Meyers — *Dec 2022*
- Developed a deep learning model using graph convolutional networks (GCNs) and Bi-LSTMs to improve multi-argument identification and classification for context understanding on the Nombank dataset

Other Experience

TAMUhack | *Logistics Lead* - Led a team of 10 to organize logistics for Texas' largest hackathon. — Texas A&M University
Mar 2019 - Mar 2022

Explorations Research Journal | *Editorial Board Member* - Edited manuscripts prior to publication — Texas A&M University
Mar 2019 - Mar 2022