

Eesha Shetty

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EDUCATION

Carnegie Mellon University

Pittsburgh, PA

Master of Science in Artificial Intelligence and Innovation | GPA: 4.0/4.0

Graduation Date May 2024

Selected Coursework: Introduction to Machine Learning, Current: Introduction to Deep Learning, Current: Machine Learning with Large Datasets, Current: AI Engineering (Machine Learning in Production)

Vellore Institute of Technology

Vellore, India

Bachelor of Technology in Computer Science and Engineering | GPA: 8.71/10.0

August 2022

Selected Coursework: Data Structures and Algorithms, Artificial Intelligence, Image Processing

SKILLS

Technical Skills: Machine Learning, Deep Learning and Neural Networks, Computer Vision

Programming Skills: Python, Java, Tensorflow, PyTorch, PySpark, NodeJS, C/C++, ReactJS, AWS, Git, Docker

Languages: English (Fluent/Native), Hindi (Fluent/Native)

PROFESSIONAL EXPERIENCE

Amazon

Pune, India | Remote

Software Development Engineering Intern

January 2022 - June 2022

- Developed an event notification system for a new service, using Amazon SQS and Lambda to devise notification system. This system helped customers still subscribed to the older service to receive updates from new service before getting on-boarded
- Designed a Data Warehouse for the new service and implemented it on AWS Redshift with an automated pipeline. Service can now store and process a large amount of data on Redshift for applying data analytics or any other tasks requiring a lot of data

Drive Analytics

Chennai, India | Remote

Computer Vision Intern

September 2021 - December 2021

- Trained Baseball Player Classification Models based on Body Pose Detection, applied concepts of Intersection over Union, YOLO Object Detection and Tracking.
- Models were trained on TensorFlow and deployed into production, improved accuracy from existing models by 5%

Amazon

Pune, India | Remote

Software Development Engineering Intern

May 2021 - July 2021

- Automated entire process of Data Subject Access Requests built on an AWS Infrastructure
- Designed and implemented the entire infrastructure with AWS Technologies such as CloudFormation Templates, SQS, Lambda. Helped automate a process that would usually take about 30 days to do manually.

PROJECTS

Referring Audio Segmentation | Academic Project, Introduction to Deep Learning

March 2023 - Present

- Given an audio A and a corresponding textual expression E describing a sound event in the given audio A, referring audio segmentation aims to segment the referred segment of the audio.
- Ongoing research, working on implementing this by creating encoders for audio and textual feature extractions and finding the similarity distance between them.

Learning Mutational Signatures | Independent Study Project, with Xu Lab and Lehmann Lab

February 2023 - Present

- Working on methods for extracting mutational signatures in cancerous cells
- Ongoing research, applying concepts of Matrix Factorization in Collaborative Filtering, working on figuring out whether recommender model concepts can be applied to genetic data.

Captionary | Academic Project, Art and Machine Learning. [<https://tinyurl.com/captionary>]

February 2023

- Created a game inspired by Pictionary, with AI as the middleman providing aid to guesser to converge at a solution. Uses a popular model called ScribbleDiffusion.
- The guesses are scored by a BLIP captioning model, which I fine-tuned on a custom dataset created specifically for this game.

Movie Recommendation System | Academic Project, Machine Learning in Production

February 2023 - Present

- Developed a recommender model with sci-kit learn to provide movie recommendations to a user, provided movie watching data read from a Kafka Stream
- All components are unit tested and triggered by an automated Jenkins CI/CD pipeline. Currently working on developing monitoring tools and deploying into production with Docker

LEADERSHIP

Member at Association for Computing Machinery, VIT Student Chapter. Worked under the Research Wing from 2018-2021, during that time I was **Co-Editor** at the ACM-VIT Medium Blog [<https://medium.com/acmvit>] and served on the 2020-2021 Board as the **Technical Director/Vice Chair**.