# Anirudh Joshi

## joshianirudh.github.io

J 412-6921-884 

ajoshi3@andrew.cmu.edu 
In linkedin.com/in/anirudh-joshi-74aa53175 

p github.com/joshianirudh

#### Education

**Carnegie Mellon University** 

Aug. 2024 - Dec. 2025

Master of Science in Artificial Intelligence Engineering

Pittsburgh, PA

PES University

Aug. 2019 - May. 2023

Bachelor of Technology in Computer Science Engineering CGPA: 8.51

Bangalore, India

#### **Relevant Coursework**

**Courses**: Introduction to computer systems, Large Language Models Methods & Applications, Introduction to Machine Learning with Adversaries in mind, System & Toolchains for AI, Introduction to Information Security.

## **Experience**

#### **Hewlett Packard Enterprise**

August 2023 - May 2024

Cloud Engineer-1

Bangalore, India

- Integrated networking device statistics into data pipelines using REST APIs, enhancing data accessibility and real-time monitoring.
- Engineered health and device state pipelines, automating the computation of statistics and optimizing data storage in Clickhouse and ArangoDB.
- Facilitated Al-Ops integration by mapping device state and health statistics to relevant Kafka topics, streamlining operations.
- Implemented dynamic logging for devices and pipelines, improving traceability and system diagnostics.

## **Hewlett Packard Enterprise**

January 2023 - July 2023

Software Engineering Intern

Bangalore, India

• Delivered a real-time network monitoring script, detecting and managing devices with excessive bandwidth usage. Utilized time-series forecasting algorithms for anomaly detection, identifying increasing usage patterns and implementing throttling mechanisms for top-talking devices, ensuring network stability.

**PESU Venture Labs** 

July 2022 - December 2022

Machine Learning Intern

- Bangalore, India
- Developed a Journal Recommender System, leading the end-to-end process from data collection and cleaning to feature engineering and multi-label classification, enhancing research accessibility.
- Designed a Glassdoor scraper to extract job descriptions and analyze the most in-demand skills, informing strategic career planning.
- Contributed to a real-time weather forecast model by leveraging incremental learning, improving prediction accuracy.

#### **Projects**

## Attention Based Evolutionary Approach for Image Classification $\underline{\mathsf{Link}}$

December 2022

Pioneered a novel evolutionary algorithm, integrating an Attention Mechanism for the first time in image classification.
 Demonstrated that incorporating more state-of-the-art (SOTA) methods enhances fitness, even with fewer generations of evolution.

#### An Automated Workflow for Deepfake Detection Link

March 2022

• Engineered an innovative workflow for deepfake detection, leveraging advanced algorithms to identify and mitigate fraudulent content. Proved that augmenting SOTA methods increases detection accuracy while reducing processing time.

#### Financial Insights Using LLM Code

September 2023

• Developed a Streamlit app that automates financial analysis by extracting recent data from Google articles and Yahoo Finance, and utilizing GPT-3.5 to provide insightful financial advice based on the aggregated information.

#### Chat with Personal Documents using Mistral 7B Code

November 2023

• Created a cost-effective, private chat solution for personal documents by implementing Mistral-7B, eliminating the need for expensive proprietary models like GPT or Claude, and safeguarding sensitive information.

## **Technical Skills**

Languages: Python, Java, C

Technologies: Kafka, Docker, Kubernetes, Argo CD, Maven, SQL, Mongo DB, Arango DB.

Frameworks & Libraries: : Linux, Jenkins, GitHub, Open Al API , Hugging Face API, Pytorch, Tensorflow, Pandas,

Numpy, Scikit-learn, Spacy, NLTK, Gensim, Scipy, Streamlit, Hugging Face, Matplotlib, Seaborne, Plotly.