

Anirudh Kashyap Ramesh

Arlington, TX | +1 (682) 559-5269 | anirudhmaven24@gmail.com | [LinkedIn](#) | [Portfolio](#)

Objective

Seeking a Software Engineering/Machine Learning internship in Summer 2025.

Experience

Full Stack Software Developer Intern **Avanseus, Bengaluru** **Feb 2024 – Jul 2024**

- Developed and maintained full-stack applications using React, Spring Boot, and MongoDB.
- Contributed to both frontend and backend components, including CRUD operations, form handling, and server-side pagination.
- Enhanced system functionality and user experience by effectively utilizing Axios for HTTP requests.

Education

Masters- Computer Science **University of Texas at Arlington** **Aug 2024 - Present**
CGPA 4.0/4.0

Data Analysis and Modelling techniques

Design And Analysis of Algorithms

Artificial Intelligence

Machine Learning

Data Mining

Database Systems

Bachelor of Engineering- Information Science

JSS Academy of Technical Education, Bengaluru

Aug 2019 – May 2023

CGPA 9.0/10.0

Big Data Analytics
Operating Systems

Database management
Object-Oriented Concepts

Machine Learning
Software Engineering

Technical Skills

- **Programming Language** : Python, JavaScript, C
- **Platform and Tools** : GitHub, Git, Docker, Kubernetes, MS Excel , VS Code
- **Operating Systems** : Windows, Mac OS, Linux
- **Technologies** : HTML, CSS, React, Node.js, AWS
- **Machine Learning& Data Analysis** : TensorFlow, Keras, NumPy, Pandas, Matplotlib, Scikit-learn, CNN, RNN, NLP
- **Predictive Modeling & Analysis** : Regression, Classification, Clustering, Anomaly Detection
- **Data Handling & Databases** : MySQL, MongoDB, SQL, Vector Databases

Academic Projects

Pneumonia Detection Using CNN

March 2023

- Developed a CNN-based machine learning model that achieved a 92% accuracy in detecting pneumonia from X-ray images, improving diagnostic speed by 30% compared to traditional methods.
- Optimized training on a dataset of 5,000 images using TensorFlow, Keras, and Tflern, reducing training time by 15%.
- A frontend is created for uploading X-ray images using flask.

Search Engine using TF-IDF & Cosine Similarity

February 2025

- Developed a search engine using TF-IDF weighting and Cosine Similarity for efficient document ranking.
- Constructed a postings list to store documents sorted by relevance for optimized retrieval.
- Implemented a top-K weighted documents retrieval strategy to improve query processing efficiency.
- Enhanced performance using an upper-bound scoring mechanism for faster similarity calculations.
- Dynamically adjusted retrieval depth when necessary to maintain high recall and precision for relevant search results

LLM-Powered Cold Email Generator for Job Applications

February 2025

- Developed an AI-driven job application assistant using LangChain, LLMs (Llama-3.3-70b), and Prompt Engineering to generate personalized cold emails for job applications.
- Implemented a Retrieval-Augmented Generation (RAG) pipeline with ChromaDB, a vector database to match applicant skills with job descriptions, improving relevance in automated email content.
- Automated the job application workflow by integrating LLMs, web scraping, and structured data extraction, enabling seamless job posting retrieval and personalized email drafting.