Mir Asim Ali

9849407125 | mirasimali2003@gmail.com | LinkedIn | Portfolio Website

Education

Bachelor of Engineering, Computer Science — Osmania University

2021 – 2025 | Hyderabad | GPA: 7.8/10 (expected) | Relevant Courses: ML, NLP, Deep Learning

Intermediate (MPC, 12th) — Sri Chaitanya Junior College

2019 - 2021 | Hyderabad | Scored 8.3/10 | Math & Physics Focus

Technical Skills

- Programming: Python, TensorFlow, PyTorch, OpenCV, Scikit-Learn, Java, C, C++, Javascript, HTML, CSS, SQL
- ML & AI: Deep Learning, Computer Vision, NLP.
- Data Science: Pandas, NumPy, Matplotlib, Data Preprocessing, Image processing
- Tools & Frameworks: Git, Jupyter Notebook, APIs, LangChain

Experience

Machine Learning Intern (Tech Team)

CVIT Lab, IIIT-Hyderabad

Nov 2024 - Present

- Developed and integrated a script identification module for printed, handwritten documents in multilingual OCR pipelines, deployed via IIIT-H's public iLoch API platform
- → Endpoint: identify_script_asim_code_layout_postprocess
- Worked on bilingual and multilingual script separation for Indic languages, using deep learning models (CNNs, ResNet based) trained on custom datasets.
- Conducted extensive model training, validation, and dataset cleaning, addressing data overlap issues and layout-specific challenges.
- Participated in weekly research and engineering meetings, contributing to design, debugging, and deployment decisions.

AI/ML Intern

iHub-Data, IIIT-Hyderabad

Jan 2024 - July 2024

- Built and trained a custom YOLOv8 object detection model to identify and track owls in images/videos.
- Integrated and deployed ChatGPT API locally, enabling efficient conversational AI experimentation without cloud dependency.
- Worked with Hugging Face Transformers for fine-tuning and evaluation of pre-trained language models.
- Completed weekly hands-on assignments and research notebooks, covering:

Convolution, pooling, padding, kernel size & transfer learning, Forward/backward propagation and loss functions, Gradient descent, perceptron, regression, clustering, RNNs, Probabilistic ML models and neural network training, Gained practical exposure to Colab, PyTorch, TensorFlow, and modern ML workflows.

Projects

- Script Separation (Indic Scripts) Printed and Handwritten documents: Developed 13 bilingual and 12 multilingual machine learning models for word-level script separation in Indic printed documents as part of an OCR pipeline for Indic languages.
- Promptly: A lightweight Groq API chatbot enabling seamless LLM integration into custom websites with minimal setup.
- ResQ-Bubble: Full-stack disaster relief web app with chat, resource sharing, and agency management.
- Emotion-Aware-Keyword-Extraction-Model: An explainable multi-task NLP system that detects emotions and their key drivers for use in mental health, social media, and conversational AI.
- Owl Detection (YOLOv8): Trained a YOLOv8 model to detect owls using a custom dataset. and more

Achievements & Extracurricular

- Training program on AIML at IIIT Hyderabad
- Amazon Web Services(AWS) Academy AI-ML Virtual Internship
- · Microsoft Transact SQL Badge
- NVIDIA AI: Basics to GenAI Practice Certification
- Python Full Stack Developer Virtual Internship Completion
- Attended 10+ hackathons, driven by a strong enthusiasm for rapid prototyping, and creative problem-solving.
- AWS Academy Data Analytics