Mohammad Ausaf

LinkedIn: linkedin.com/mohammad-ausaf/
GitHub : github.com/AusafMo
Ghaziabad, U.P, India

Email: ausaf9911@gmail.com
Contact: 91-7007388740

EDUCATION

- **KIET Group of Institution** — Ghaziabad, India
  Bachelor of Technology - Computer Science — 2024
  Courses: Probability and Statistics, Calculus, Operating Systems, Data Structures and Algorithms, Machine Learning, Databases

- **Army Public School** — Allahabad, India
  Higher Secondary Certificate (HSC) - Physical Sciences and Mathematics — 2019
  Courses: Physics, Chemistry, Mathematics

SKILLS SUMMARY

- **Languages**: Python, C++, HTML, SQL
- **Frameworks**: Sci-Kit, Tensorflow, OpenCV, Keras, Flask, Beautiful-Soup
- **Tools**: GIT-GitHub, HuggingFace, VS-Code, Kaggle
- **Platforms**: Windows, GCP (Vertex AI Beginner), OpenAI API
- **Soft Skills**: Academic & Research Writing, Teamwork, Event Managment

PROJECTS

- **AushadHub: ML-based Medicinal Herb Identification Platform - (Image Processing, Transfer Learning, Google Cloud) - [Link]:**

  - Developed a Medicinal Herb Identification Platform leveraging ResNET50, achieving a testing accuracy of 98% for classification tasks across 30 labels
  - Implemented preprocessing techniques to optimize images before model inference, ensuring efficient and accurate identification of medicinal herbs.
  - Deployed a Flask application as the backend system on Google Cloud, serving as an inference endpoint for image uploads.
  - Created a user-friendly interface using HTML, CSS and JavaScript allowing users to upload images for plant identification.
  - Added functionality to display comprehensive descriptions of the predicted plant species, enhancing user experience and understanding.
  Tech : Python, PyTorch & Tensorflow, Keras, Flask, HTML, CSS, GCP

- **Exercise Monitoring System: Computer Vision based Exercise Monitor and Counter - (Image Processing, Computer Vision) - [Link] :**

  - Developed a Python-based exercise monitoring system leveraging OpenCV, Mediapipe, and Scenedetect for real-time video analysis, including frame filtering to eliminate frame fluctuations.
  - Utilized Mediapipe's pose estimation to track key body landmarks, particularly knee and elbow positions during exercises, ensuring precise angle calculations.
  - Created an interactive system offering real-time feedback on exercise performance and repetition counting, incorporating frame filtering.
  Tech : Python, OpenCV, PyScene-Detect, Numpy

- **Sentiment Analysis Project: Performing Sentiment analysis on Web-Articles - (Web Scraping, Natural Language Processing (NLP)) - [Link]:**

  - Conducted a sentiment analysis project utilizing Python and various libraries including BeautifulSoup, Pandas, and NLTK.
  - Extracted article content and titles from diverse web pages using web scraping techniques, handling inconsistencies in HTML structures and data extraction.
  - Used Regular Expressions (Regex) for pattern matching and text manipulation tasks, enhancing data preprocessing capabilities.
  - Implemented sentiment analysis by scoring positive and negative words, calculating polarity, subjectivity, and linguistic metrics such as average sentence length and complex word count.
  Tech : Python, Beautiful Soup, NLTK, Regex, HTML

MOOC(S) & CERTIFICATIONS

- Data Science and Machine Learning Bootcamp - A-to-Z Mastery (Udemy)
- Object Oriented Data Structures in C++ - University of Illinois at Urbana-Champaign (Coursera)
- Algorithmic Toolbox - University of Michigan (Coursera)

VOLUNTEER EXPERIENCE

- **Core Team Member, ISTE (Indian Society for Technical Education)**
  contributed to organizing events for the ISTE KIET chapter within college like Quizzes, Poster Competitions etc.