Bittu Jaiswal

Hyderabad, Telangana, India

- +917076455854 | ■ jaiswalbittu0319@gmail.com | ☑ github.com/jbittu | ☐ linkedin.com/in/bittu-jaiswal/

Objective

I want to learn and work in challenging environments so that I can enhance skills, innovate ideas and implement my knowledge. I have sound problem solving skills fueled by decent understanding of data structures and algorithms.

Education

Mahindra University

Hyderabad , India

M.Tech in Artificial Intelligence and Data Science

August 2023 - On Going

CGPA: 7.6

National Institute of Technology, Sikkim

Sikkim, India

BTech in Electrical and Electronics Engineering

July 2016 - March 2020

CGPA: 7.26

Skills

Programming Languages Java, Python, HTML, CSS, JavaScript, MongoDB, SQL

Skills Data Structures and Algorithms, Machine Learning, Operating Systems, NLP, Keras

Tools VS Code, Eclipse, Google Colab, Postman, Matlab

Frameworks and Libraries React JS, Next JS, Express JS, Node JS, Pandas, NumPy, PyTorch, TensorFlow

Projects

Emotion Detection Using CNN and FER-2013 Dataset

Mahindra University, Hyderabad

- Developed a system to detect emotions from facial expressions using convolutional neural networks (CNN) and the FER-2013 dataset.
- Addressed class imbalance in the FER-2013 dataset using image augmentation and class weights, improving model robustness.
- Designed and implemented multiple CNN models, including VGG16 and ResNet50v2, comparing their performance to optimize accuracy.
- Achieved a 66% overall accuracy on emotion classification, analyzing model performance through precision, recall, and F1-scores
- Technical Skills: Python, TensorFlow, Keras, ResNet50v2, VGG16, OpenCV, Gradio
- GitHub Link: github.com/jbittu/emotion_detection

Swiggy Delivery Time Prediction Project

Mahindra University, Hyderabad

- · Developed machine learning models to predict Swiggy delivery times, optimizing performance through feature engineering.
- · Implemented and managed a robust DVC pipeline workflow for version control and reproducibility of ML experiments.
- · Deployed REST APIs to integrate predictive models into production systems, ensuring reliability and scalability.
- Containerized ML workflows using Docker and deployed models on AWS (EC2, S3, Lambda) with CI/CD pipelines.
- Technical Skills: Python, DVC, Docker, CI/CD, REST APIs
- GitHub Link: github.com/jbittu/swiggy-delivery-time-prediction

Paralization K-Means Clustering Using OpenMP

Mahindra University, Hyderabad

- Implemented and optimized the K-Means clustering algorithm using OpenMP for partitioning data into K clusters.
- $\bullet \ \ \text{Analyzed performance across sequential and parallel executions using datasets with 1 million 2D points.}$
- Achieved a maximum speedup of 18.35x with 128 threads, highlighting the efficiency of parallel computing.
- Technical Skills: OpenMP, Parallel Programming, C, Algorithm Optimization
- GitHub Link: github.com/jbittu/k_means_clustering

Workout Buddy - Full Stack Web Application

Personal Project

- · Developed a full-stack web application called Workout Buddy to help users track their workout routines
- Designed an interactive frontend using React for seamless user experience and implemented forms for user input.
- Built the backend using Express.js, handling data management using MongoDB.
- Integrated the frontend with the backend to store and display user data dynamically.
- Technical Skills: JavaScript, React, Express. js, MongoDB, Node. js
- GitHub Link: github.com/jbittu/workout_buddy

Achievements

2023 **Qualified**, Graduate Aptitude Test in Engineering (GATE)

India