T. Sairam

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Skills

Programming Languages: C, Java, **Python**, **Python Flask**, **SQL**, HTML, CSS, JavaScript, **Data Structures and Algorithms**

Data Science Expertise: Predictive Modeling, Machine Learning, Regression Analysis, Classification, **Natural Language Processing (NLP)**, **Data Wrangling**, **Data Preprocessing**, **Feature Engineering**, **Deep Learning**, Time Series Analysis

Data Visualization Tools: Tableau, Power BI, **Big Data Analysis**, Matplotlib, Seaborn

Technical Tools: Git, GitHub, Jupyter Notebooks, VS Code, Postman, Docker, React.js, Express.js, Node.js

Project Work

Entertainment and Social Media — Sep 2024 - Present
Data Scientist and Full-Stack Developer

- Constructed a full-stack video-sharing platform that utilized React.js, Node.js, Express.js, and Python Flask to deliver personalized content recommendations; facilitated smooth playback for over **100 videos from 4 different user accounts** with optimized user-centric features.
- Implemented robust user authentication via MongoDB and optimized video management—uploads, metadata, and engagement—through SQL and MongoDB databases.
- Integrated **machine learning** and **image processing** algorithms to refine content suggestions based on user interactions and image recognition. Created **SQL queries** to enhance content feeds.
- Technologies Utilized: Machine Learning, Deep Learning, MongoDB, Express.js, React.js, Node.js, SQL, Python Flask, CSS. Click for demo: Google Drive Link

Social Interactions Dashboard: Tracking Comments and Likes — Sep 2024 - Nov 2024
Data Analyst

- Crafted an interactive **Tableau dashboard** for real-time analysis of user engagement, focusing on 31 rows of likes data from 4 accounts and 29 rows of comments data, to assess video performance and audience sentiment.
- Built two dashboards: one for visualizing likes and user interactions, and the other presenting a catalog of comments, ensuring easy navigation for comprehensive data exploration.
- Integrated **interactive visualizations** such as bubble charts, heatmaps, and line graphs, enabling deep dives into social engagement patterns over time across videos. Live

Weather Prediction using Machine Learning — Feb 2024 - Apr 2024
Data Scientist and Full Stack Developer

- Built an accurate **machine learning model** for predicting weather patterns based on historical data.
- Developed and deployed a Flask-based backend with RESTful API to process user input and deliver real-time weather forecasts based on the model's predictions.
- Designed a React frontend that interfaces with the OpenWeatherMap API to fetch current weather conditions and send queries to the Flask backend for forecast data. Live

Education

Centurion University of Technology and Management, Parlakhemundi — Sep 2022 - Present
Bachelor of Technology in Computer Science and Engineering — *Current CGPA: 9.31/10*

- **Specialized Coursework:** Machine Learning for Predictive Analytics, Data Analytics Using Tableau, Deep Learning for Image Analytics
- **Core Coursework:** Machine Learning with Python, Data Analysis and Visualization in Python, Database Management, Operating Systems, Android Development, Data Warehousing and Mining, Discrete Mathematics, Java, C Programming, Project Management, Data Structures and Algorithms, Design Thinking, IT Infrastructure, Industrial IoT

Awards and Certificates

- Certificates in Python (Basic), Java (Basic), SQL (Basic, Intermediate) from HackerRank.
- LeetCode's 50 Days Badge (2024) and HackerRank's SQL Gold Badge.
- JEE Mains 2022: 75.76 percentile, All India Rank (CRL): 225113, OBC-NCL: 71591