PAYIDI VENKAT SAINATH

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in Venkat Sainath ⭘ Venkat Sainath

Education

National Institute of Technology,Andhra Pradesh,   2020 – 2024
Bachelor of Technology in Electrical and Electronics Engineering
CGPA : 7.94

Narayana Junior College, *Intermediate*
MARKS: 972 out of 1000

Sri Chaitanya Techno School, *Secondary Education*
GPA: 10

Skills

Web Development: JavaScript, React.js, Express.js, Node.js, SQL, Bootstrap, CSS, HTML

Data Science and Analytics: Python, Machine Learning, Deep Learning

CS Fundamentals: Data Structures and Algorithms

Platforms: Postman, Git, TensorFlow, Matlab, Google Colab

Experience

Open-Source Contributor   2024(Current)
Project: Web Dev Tools is a website designed to empower web developers with a wide array of code samples and snippets
Technologies: React.js, SCSS, GitHub API, JSON, Tailwind
- Introduced a web tool that allows developers to share their open-source projects, displaying repository data from GitHub sorted by stars, last update, and language.
- Improved user experience and engagement with the project by 30% based on analytics from GitHub stars and issue reports.
- Introduced dark mode feature to about page.

VIsakhapatnam Steel Plant, *Intern*   06/2022 – 07/2022 | Visakhapatnam, India
- Analyzed *Variable Voltage* and *Variable Frequency Drives* for Electric Overhead Travelling (EOT) cranes.
- Specialized in *DC Drive motors* with extensive practical knowledge.

Projects

Assessment and Comparison of Classical and Machine Learning based Load Forecasting for Smart Grid
Tech used: *Machine Learning,Python,NumPy,Pandas,Scikit learn,Matplotlib,TensorFlow,Linear Regression,RFE,ANN, GRU,Exponential Smoothing*
- Implemented **Multiple Linear Regression**, **Exponential Smoothing**, **Artificial Neural Network**, and **Gated Recurrent Unit** models for load forecasting across 5 state load dispatch centers.
- Achieved significant performance improvement by implementing ANN and GRU, leading to a reduction in MSE ranging from 99.12% to 99.55% compared to classical Exponential Smoothing and MLR methods.

Flower Classification using TensorFlow
Tech used: *Machine Learning,Python,TensorFlow,Keras,Matplotlib,Gradio,CNN*
- Developed a **Convolutional Neural Network** based flower classification model using **TensorFlow**, achieving an accuracy of 85.46%.
- Created a user-friendly interface using **Gradio** to allow users to interactively classify flower images using the trained model. Users can upload images or use their webcam for real-time classification.

Face Detection Website
Tech Used: *JavaScript,React.js,Express.js,Node.js, PostgreSQL,JSON,REST API,NPM,Bcrypt,Knex,Tachyons,CSS,HTML*
- Developed a face detection website using **React.js Node.js**, **Express.js**, **JSON**, **SQL**, **PostgreSQL, Machine Learning API**. All components are connected using **Knex**, achieving 100% accurate face detection.
- Employed **Bcrypt** for 100% password protection.

Certificates

- NPTEL - Natural Language Processing ⧉
- NPTEL- Data Base Management System ⧉
- Game Development using Pygame ⧉