MOHAN R

Bengaluru, India

Education

Don Bosco Institute of Technology

Bachelor of Engineering in CSE [AI & ML]

Dec 2021 - May 2025

CGPA: 8.66

• Coursework: Operating Systems, Data Structures, Analysis of Algorithms, Computer Networks, Machine Learning, Networking, Databases, DBMS, OOPS

Technical Skills

Languages: Python, C, C++, HTML, CSS, JavaScript, SQL

 $\textbf{Frameworks/Libraries:} \ \ \text{NumPy, Pandas, Matplotlib, Scikit-learn, PyTorch, TensorFlow, React, Node.js, Express.js,} \\$

Streamlit, Flask

Tools & Technologies: VS Code, GitHub, Git, Jupyter Notebook, Google Colab, PyCharm, PostgreSQL, MongoDB

Other Skills: Data Structures and Algorithms (DSA), Problem-Solving, Communication, Teamwork

Experience

Compsoft Technologies

Oct 2023 - Dec 2023

Machine Learning Intern

Bengaluru, India

- Developed and deployed an image detection model: Created a license plate recognition system with Python, OpenCV, and EasyOCR, achieving 90% accuracy on over 100 images, enhancing detection speed by 20% through optimized preprocessing techniques.
- Improved system scalability: Analyzed and fine-tuned model performance, leading to a 15% increase in scalability, while integrating the solution into an automated system, reducing manual intervention by 30%.
- Collaborated with cross-functional teams: Worked closely with engineers and product teams to ensure seamless integration, timely project delivery, and exceeding client expectations.

Projects

WhatsApp Chat Analyzer | Streamlit, Pandas, Matplotlib, Seaborn

- Transformed WhatsApp chat data into actionable insights: Developed a Streamlit web application to analyze chat data, providing users with interactive visualizations of message statistics, timelines, activity heatmaps, word clouds, and emoji usage trends. Handled chat data analysis for over 100+ users and supported file uploads up to 200MB.
- Ensured real-time analysis and accessibility: Leveraged Pandas for efficient data preprocessing and used Matplotlib and Seaborn to craft visually compelling data representations. Deployed on Render, ensuring real-time analysis and broadened accessibility.

Gesture Pilot | Python, OpenCV, Mediapipe, PyAutoGUI

- Developed a real-time hand gesture recognition system: Built a tool using computer vision and hand landmark detection to control system actions (like volume control and cursor movement) with hand gestures, achieving 95% gesture recognition accuracy over 10 unique gestures.
- Optimized gesture recognition and system control: Improved performance by reducing frame processing time, leading to a 20% reduction in CPU load, while maintaining high accuracy for both single and multi-hand gestures.

Aura Cast | Node.js, Express.js, Axios, OpenWeatherMap API

- Global real-time weather updates: Built a weather web application that provides real-time weather data for over 200,000 cities globally, increasing accessibility and resulting in a 20% increase in user engagement.
- Optimized API calls for enhanced performance: Achieved response times under 500ms using Axios, leading to a 30% reduction in bounce rates due to faster data retrieval and improved user experience.

Certifications

- 100 Days of Code: The Python Bootcamp Udemy
- The Complete Web Development Bootcamp Udemy
- Python for Data Structures Coursera
- Introduction to SQL University of Michigan
- AI for Everyone Coursera