B PURUSHOTHAM

Bengaluru, KA | +91-8464971133 | purushothambollepalli01@gmail.com | LinkedIn | GitHub

PROFESSIONAL SUMMARY

Computer Science graduate specializing in Artificial Intelligence and Machine Learning, with experience in building and optimizing real-time applications. Skilled in Python, JavaScript, SQL, and full-stack development, with hands-on expertise in machine learning, computer vision, and data analysis. Proven ability to design scalable, performance-driven solutions and deliver measurable results, backed by strong foundations in algorithms, data structures, and software engineering.

EDUCATION

B. Tech in Computer Science and Engineering (AIML)   **2021 – 2025 | CGPA: 8.13**
Sreenivasa Institute of Technology and Management Studies, Chittoor

Intermediate (MPC)   **2019 – 2021 | PCT: 95.3%**
Narayana Junior College, Tirupati

SKILLS

Programming Languages	**:** Python, JavaScript, C++
Web Development	**:** React.js, Node.js, Express.js, HTML, CSS, RESTful APIs
Databases	**:** MySQL, SQLite
Machine Learning & AI	**:** Scikit-learn, NumPy, Pandas, Matplotlib, Seaborn, OpenCV, MediaPipe
Core Competencies	**:** Data Structures & Algorithms, OOPS, Responsive Web Design, Git

EXPERIENCE

AI-ML Development Intern — Next24tech Technology & Services | Jul 2024 – Aug 2024
- Developed a real-time road lane detection system using OpenCV and ML algorithms, achieving 95% accuracy on 10,000+ frames.
- Optimized model inference latency by 30%, enabling smooth live video processing.
- Collaborated with cross-functional teams to integrate solutions into scalable production systems.

PROJECTS

Sign2Text – Real-Time Hand Gesture & Sign Language Detection [link]
(Python, Flask, MediaPipe, OpenCV, scikit-learn)
- Built a real-time system to detect and classify sign language gestures using MediaPipe for hand landmark extraction and a Random Forest classifier, achieving 90%+ accuracy.
- Developed a Flask-based web app with Socket.IO for live video streaming and real-time predictions, enhancing accessibility for differently-abled users.
- Implemented custom data collection, model training, and optimized inference pipeline to deliver smooth, low-latency performance.

News Nexus – News Aggregation Platform [link]
(JavaScript, News API, HTML, CSS)
- Developed a dynamic news aggregation web app that fetches and displays category-based articles using the News API.
- Implemented search and filter functionalities to deliver personalized, relevant results in real time.
- Designed a fully responsive UI optimized for mobile, tablet, and desktop devices.

CERTIFICATIONS

Deloitte Australia Data Analytics Job Simulation – Forage (Apr 2025)
Backend Web Development with Node.js and Express – NxtWave (Apr 2025)
Introduction to MySQL and Database Management Systems – NxtWave (July 2024)