

# THULASIDHARAN K

Bangalore | [thulasidharan0106@gmail.com](mailto:thulasidharan0106@gmail.com) | 8838944469 | [linkedin.com/in/thulasidharan-k-037a52261](https://linkedin.com/in/thulasidharan-k-037a52261)  
[github.com/ThulasidharanTharun](https://github.com/ThulasidharanTharun)

## Professional Summary

Aspiring Software Developer with a strong foundation in Python, Java, and Full Stack Development MERN & Django. Skilled in building dynamic web applications, RESTful APIs, and both frontend and backend development, with a keen interest in solving real-world problems through clean, maintainable code. Eager to contribute to innovative projects and continuously grow as a versatile developer.

## Education

- Panimalar Engineering College, Chennai**, BTECH in Information Technology Nov 2021 -Apr 2025
- CGPA: 8.9 / 10
  - Coursework** : Database Management System , Object Oriented Programming , Software Engineering

## Skills

**Languages** : Python, Core Java, SQL, HTML, CSS

**Technologies & Frameworks** : MongoDB, Express JS, React JS, Node JS, Django

**Soft Skills** : Communication , Leadership , Problem Solving

## Experience

- Software Development Internship** - Codveda Technologies. Jun 2025 - Sep 2025
- Assisted in developing and testing Python-based backend modules and REST APIs.
  - Collaborated with the team under Agile methodology, writing test cases and fixing bugs.
  - Improved efficiency by automating routine data processing and validation tasks.

## Projects

**Enhancement of Design Detection Performance using AI Technologies** : Python, AI, Computer Vision, OpenCV, TensorFlow, PyTorch, NumPy, Pandas 2024

Developed an AI-based system to improve design detection accuracy in images and documents. Applied computer vision techniques for feature extraction and preprocessing. Trained deep learning models using TensorFlow and PyTorch to enhance detection performance. Implemented data augmentation and optimization methods to reduce false positives. Evaluated and fine-tuned models to achieve higher precision and recall. Automated detection workflow to support real-time performance improvement.

**AI-Powered Sentiment Analysis on Customer Reviews** [github.com/ThulasidharanTharun](https://github.com/ThulasidharanTharun)

**Technologies** : Python, NLP, TensorFlow, Scikit-learn

Designed a sentiment analysis system to interpret customer feedback as positive, negative, or neutral. Applied NLP and machine learning techniques to improve prediction accuracy. Gained experience analyzing real-world data and troubleshooting model performance — relevant to support analytics tools.

**Vehicle Detection And Counting using OpenCV** 2025

**Technologies** : Python, OpenCV, NumPy, time, imutils, VS Code, CCTV footage, traffic camera video

This project aims to automatically detect and count vehicles passing through a particular area in a video feed using Computer Vision techniques. The system uses OpenCV in Python to process real-time or recorded video streams, identify moving vehicles, and keep a count of them as they cross a defined detection line or region. The project helps in traffic monitoring, vehicle flow analysis, and smart city applications, where accurate vehicle detection is crucial for decision-making.

**E-Commerce Platform** [github.com/ThulasidharanTharun](https://github.com/ThulasidharanTharun)

**Technologies** : MERN Stack (MongoDB, Express.js, React.js, Node.js), JWT Authentication, REST APIs, Stripe Payment Integration.

E-Commerce platform using the MERN stack is a full-stack web application that allows users to browse products, add them to the cart, and make secure purchases. It includes key features like user authentication, product management, and order tracking. The frontend is built using React for a responsive user experience, while Node.js and Express.js handle backend logic and APIs. MongoDB is used to store product, user, and order data efficiently. This project demonstrates my ability to develop a complete end-to-end web application using modern technologies.