

Divyashree Mallarapu

Bengaluru | mdivya0212@gmail.com | 6363961217 | LinkedIn | GitHub | Portfolio

Objective

AI/ML Engineering student with hands-on experience in developing AI solutions and machine learning applications. Skilled in problem-solving and adapting to new technologies. Looking to apply my knowledge in a dynamic environment, collaborate with teams, and contribute to real-world AI-driven solutions.

Education

PES Institute of Technology and Management, Shivamogga

Dec 2022 – Mar 2026

Affiliated with Visvesvaraya Technological University (VTU), Belagavi

Bachelor of Engineering in Artificial Intelligence and Machine Learning

Current CGPA: 8.85

Coursework: Data Structures and Algorithms, Artificial Intelligence, Machine Learning, Computer Vision

Experience

AI Engineer Intern

Aug 2024 – Feb 2025

ResoluteAI Software Pvt Ltd (Remote)

- Developed YOLO-based object detection models achieving 95% accuracy and built production-grade real-time applications using Streamlit and OpenCV.
- Implemented advanced OCR using PaddleOCR and EasyOCR, achieving 90% accuracy in extracting text from legal and financial documents.
- Designed and fine-tuned image classification models (DenseNet, VGG19), improving accuracy by 20%.
- Built Text to Video and Image Generation systems, leveraging deep learning models to convert text descriptions into video clips and generate high-quality images.

Projects

Text to Image Generation App

- Built a text-to-image generation model using diffusion models for high-quality image synthesis.

RAG Document Chatbot

- Built an AI-powered document chatbot using retrieval-augmented generation (RAG) for intelligent Q&A.

Defect Detection in Rubber

- Developed a defect detection system for rubber blocks using YOLOv8 for object detection and SAM for segmentation.

Predictive Maintenance for Industrial Machinery

- Created machine learning models to predict equipment failures, reducing downtime and optimizing maintenance schedules.

Political Bias Detection App

- Built an NLP model to analyze political news articles, classify bias (Left/Right/Center), detect fake news, and compare sources from multiple news websites.

Achievements

Kickstart to Compiler Design Fundamentals – Published Book

Co-Author | June 2025

Co-authored a globally published book on compiler design fundamentals, covering lexical analysis, parsing, semantic analysis, and code generation.

Available on **Amazon** and **OrangeAVA**.

Skills

Languages & Databases: Python, C, MySQL, HTML, CSS

Tools: VS Code, Git, GitHub, Google Cloud Platform (GCP), Jupyter Notebook, Pycharm

Frameworks: TensorFlow, Keras, PyTorch, YOLO (v5/v8/v11), SAM, OpenCV, Hugging Face, Streamlit, Gradio

Soft Skills: Communication, Adaptability, Teamwork, Problem-solving, Time management