Dinesh Ram

Associate AI Engineer

✉ dineshramdsml@gmail.com · ☎ 9360232068 · in linkedin.com/in/dineshram-r · 🌐 dineshram.vercel.app

Summary

As an AI Engineer, I'm passionate about turning complex challenges into practical solutions. With strong programming skills and hands-on experience in machine learning and deep learning, I focus on building and deploying models that make a real-world impact. I'm always curious and excited to explore new ideas and find innovation in the AI space.

Experience

Edsols Innovations Pvt. Ltd.   Bengaluru, India

- **Associate AI Engineer**   **Sep 2024 - Present**
  – Developed an interactive app for children with disabilities, using ReactJS and FastAPI to create a responsive, accessible platform.
  – Implemented AI-driven phoneme matching to analyze and rate children's speech, **enhancing diagnostic accuracy by 30%** and providing real-time feedback to therapists for quicker intervention.
  – Integrated an EMR module for large-scale data management and reporting, enabling compliance with healthcare standards.

- **Graduate Engineering Trainee**   **Jul 2023 - Aug 2024**
  – Developed Flask-based software to process large financial datasets, optimizing SQL commands and parallelizing report generation with PostgreSQL, **reducing report generation time by 70%** and visualizing insights through Power BI dashboards, significantly improving efficiency.
  – Built and deployed computer vision and predictive models using deep learning frameworks on robots for automation tasks.
  – Deployed a chatbot on AWS, enabling customers to access stock data more quickly, reducing data retrieval time and enhancing overall user efficiency.

GE Healthcare Lab @Sri Ramakrishna Engineering College   Coimbatore, India

- **Student Researcher**   **Jan 2022 - May 2023**
  – Conducted research in collaboration with GE Healthcare to design a **YOLOv5-based Medical Equipment Detection System** for ICU monitoring.
  – Achieved **90% detection accuracy** by collecting and annotating real-world datasets from hospital environments and optimizing the model with TensorRT for **20ms inference time**.
  – Deployed the solution on Jetson Nano for real-time edge performance, reducing equipment identification delays and improving ICU workflows.

Projects ⚲

Dynamic Knowledge Graph Generator — LTTS Techgium
Streamlined data structuring by generating **dynamic, clutter-free knowledge graphs** using NLP and neuralcoref.

AI Image Description Tool for the Visually Impaired — Smart India Hackathon
Designed a **CNN-LSTM model** for real-time image-to-speech conversion, enabling accessibility on edge devices.

AI-Powered Reception and Luggage Management System
Automated processes with DofBot using **OpenCV and ROS**, achieving **15-second luggage handling time** with facial recognition and robotics.

Hate Speech Detection for Twitter
Trained a **SVM classifier** model to detect hate speech in tweets **without using the Twitter API**, enhancing moderation process.

Education

Bachelor of Technology in Artificial Intelligence and Data Science   **2020 - 2024**
Sri Ramakrishna Engineering College   CGPA: 9.11/10
Coimbatore, Tamil Nadu

Certifications and Skills

Certifications

- Deep Learning with Keras, EdX
- Business English Certification (B2), Cambridge UP
- AI on Jetson Nano, NVIDIA
- AWS Machine Learning, LinkedIn
- MLOps Essentials, LinkedIn

Skills

- **Languages:** Python (NumPy), R, SQL, JavaScript, C++
- **Frameworks:** TensorFlow, PyTorch, Transformers, FastAPI, Scikit-Learn, Next.js, React, PostgreSQL
- **Core:** Machine Learning, NLP, Data Science
- **Tools:** AWS, Docker, Git