ASHVIN MANOJ

PG STUDENT

Ernakulam, Kerala, India | ashvinmanojk@gmail.com | Phone: (+91) 88482 36253
www.linkedin.com/in/ashvinmanojk289
https://github.com/ashvinmanojk289

CAREER OBJECTIVES

A results-oriented AI/ML Engineer with a strong foundation in deep learning, NLP, and computer vision. Eager to leverage hands-on experience in developing and deploying scalable machine learning solutions to solve complex business problems and drive innovation.

TECHNICAL SKILLS

Languages & Databases: Python, C++, C, SQL, R
AI/ML Frameworks: TensorFlow, PyTorch, Scikit-learn, Transformers, Pandas, NumPy
Tools & Platforms: ROS, Arduino, Git, Streamlit, Flask, MATLAB, Linux

EDUCATION

MTech in Computer Science and Engineering(AI/ML) | Rajagiri School of Engineering and Technology
CGPA - 9.49 **(Aug 2024 - Present)**

BTech (Honours) in Robotics and Automation | Adi Shankara Institute of Engineering and Technology
CGPA - 9.54 **(Oct 2020 - Jun 2024)**

Higher Secondary (12th) - Computer/ Maths | St. Mary's Public School, Thamarachal
Percentage: 92.6% **(2020)**

PROFESSIONAL EXPERIENCE

Hardware Systems Intern, Sunlux Technovations **Feb 2024 - April 2024**

Developed and debugged microprocessor programs in Assembly for industrial automation systems, contributing to a 15% improvement in process efficiency. Collaborated with a team of engineers to design and implement real-world embedded solutions for clients in the manufacturing sector.

PROJECTS

Multilingual News Audio Translator

Developed a full-stack audio translation app using Wav2Vec 2.0 for speech recognition (92% accuracy) and an mBART model, fine-tuned with reinforcement learning for fluent translation.

PDF Query Application

Developed a scalable, voice-enabled PDF query system using NLP and Streamlit, transforming static documents into conversational hubs and reducing information retrieval time by over 89%.

Automatic Weed Detection and Spraying Robot

Revolutionizing precision agriculture with an AI-powered weed detection robot using ROS and a custom hybrid EfficientNetV2 - Transformer models (97% Accuracy) for an eco-friendly herbicide application.

PUBLICATIONS

- Sreedeep Krishnan, M. Karuppasamy Pandyan, Ashvin Manoj. ***A Hybrid Transformer Model for Precision Weed Detection***. Presented at ***IEEE ACCESS '25***, Adi Shankara Institute of Engineering & Technology, June 2025.

ADDITIONAL INFORMATION

- **Certifications:** NPTEL (Python & DSA), Infosys (Prompt Engineering), Coursera (Google Data Analytics, Intro to GenAI, GenAI for UX Designers)
- **Soft Skills**: Communication, Critical and Creative Thinking, Time Management
- **Languages**: English, Malayalam, Tamil, Hindi.