



SELVAGANESH V

Artificial Intelligence and Machine Learning

Career Objective

Motivated and adaptable individual with a strong desire to learn and grow in professional environments. Passionate about continuous learning, problem solving, and contributing to meaningful projects. I focus on building solutions that are technically strong and user-friendly.

Projects

PDF-RAG-Application — Python

Developed a Retrieval-Augmented Generation (RAG) application that enables users to upload and query PDF documents interactively. Implemented semantic search using **SentenceTransformers** for embeddings and **FAISS** for efficient similarity search. Built an intuitive interface with **Gradio** for seamless PDF upload and querying. Designed the system to handle large documents asynchronously with minimal dependencies, running securely in a local environment.

Emotion Detection in Text — Python, Hugging Face NLP

Developed a multilingual emotion detection system using **Hugging Face Transformers** to classify text as **Positive, Negative, or Neutral**. Integrated **automatic language detection and translation** for seamless multi-language support. Leveraged the **twitter-roberta-base-sentiment** model for accurate sentiment prediction. Built an interactive **Gradio** web interface for real-time analysis and easy deployment. Applied to real-world use cases including **social media monitoring and user feedback analysis**.

PDF File Converter Telegram Bot — Python

Built a feature-rich **Telegram bot** to automate PDF and document conversions directly through chat. Implemented functionalities including **PDF to Word, Word to PDF, PDF splitting, image to PDF, and PDF to image conversion**. Used **PyPDF2, pdf2docx, pdf2image, and Pillow** for document processing. Enabled ZIP downloads and optimized file handling for mobile users. Ensured robust error handling, secure file management, and cross-platform compatibility.

Education

B.Tech, Artificial Intelligence & Machine Learning

2022–2026

Bannari Amman Institute of Technology, Sathyamangalam CGPA: 7.37 (till 7th Sem)

Diploma in Electrical & Electronics Engineering

2020–2023

PSG Polytechnic College, Coimbatore

Percentage: 83.41%

SSLC

2019–2020

Sakthi Vigneswara Kalvi Nilayam Hr.Sec.School,Tiruppur Percentage: 76.4%

Certifications & Participations

- Oracle Cloud Infrastructure 2025 Certified
- Machine Learning Deployment with Docker
- Generative AI Workshop (NXT Wave, IIT Delhi alumnus)

Personal Info

✉ selvavelayutham395@gmail.com

📍 Tiruppur, India

Links

🌐 LinkedIn

🐙 GitHub

📁 Portfolio

Professional Skills

Programming Languages

- 📄 Python, C, Java

Web Development & Tools

- 🌐 HTML, CSS, JavaScript
- 🖥️ Visual Studio Code
- 🔧 N8N (Workflow Automation Tool)

Machine Learning & Cloud

- 🧠 LSTM, Random Forest, CNN
- 🚢 Backend deployment with Docker
- ☁️ Cloud Computing

Soft Skills

- ⚙️ Problem Solving, Adaptability
- 👤 Presentation, Self-learning
- 👥 Teamwork

Languages

- 🗣️ Tamil (R,W,S)
- 🗣️ English (R,W,S)