



# 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.

## 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)

## 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)