G Selva   AI/ML Engineer

Contact

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Professional Summary

Results-driven **AI/ML Engineer** with specialized expertise in **Generative AI**, **Agentic Workflows**, and **Large Language Model** (LLM) optimization. Proven ability to **architect** and **deploy** intelligent systems that bridge complex human intent with precise machine execution. Adept at building autonomous **RAG pipelines**, fine-tuning open-source models for enterprise applications, and delivering high-performance solutions handling real-time data. passionate about pushing the boundaries of autonomous software engineering

Experience

AI Software Engineer - *astTECS Unified Communication Pvt Ltd **(June 2025 - Present)**

- **Spearheaded** the development of next-generation **enterprise conversational AI agents**, integrating advanced **NLU** for high-accuracy intent detection, alongside a **custom RAG (**Retrieval-Augmented Generation**)** framework to enable reliable contextual knowledge retrieval and significantly reduce hallucinations in corporate knowledge bases.

- **Architected** an **audio-driven Avatar Generation pipeline**, leveraging **diffusion models** to produce realistic, lip-synced visual agents, enabling immersive and scalable AI-powered customer interactions.

AI Trainer – Sambhav Foundation **(Dec 2024 – June 2025)**

- **Orchestrated** comprehensive AI/ML training programs for a diverse cohort of **500+ undergraduate and postgraduate students** across disciplines including Engineering, MBA, BCA, and other academic streams, bridging the gap between academic theory and real-world industry implementation.

- **Mentored** students in designing and deploying **end-to-end AI solutions**, including **Computer Vision and NLP projects**, enabling learners from both technical and non-technical backgrounds to build practical, deployment-ready skills.

Artificial Intelligence Intern – CodSoft **(Aug 2023 – Sep 2023)**

- Completed an intensive internship, successfully deploying AI-driven systems to improve efficiency and engagement.
- Gained hands-on experience in leveraging AI tools for impactful project delivery.

Skills

- **Programming Languages:** Python, JavaScript, PHP, HTML

- **Frameworks & Tools:** Hugging Face, PyTorch, TensorFlow, LangChain, LlamaIndex, CrewAI, Rasa, Sentence-Transformers, LiveKit, vLLM, Ollama

- **Specializations:** Generative AI, Agentic AI, Conversational AI, Retrieval-Augmented Generation (RAG), Multimodal AI, Web Scraping, API Integrations

Key Projects

P.A.C.E - (Pythonic AI for Coding and Execution)

- **Technology:** NVIDIA NeMo, Python, AST (Abstract Syntax Trees)
- **Impact:** Architected a natural language-to-code synthesis engine. By leveraging the NeMo framework, the system autonomously converts English descriptions into executable, syntactically correct Python scripts, significantly accelerating rapid prototyping workflows

W.E.B.S - (Web Extraction and Summarization System)

- **Technology:** CrewAI, Multi-Agent Orchestration, NLP
- **Impact:** Engineered an autonomous multi-agent system capable of navigating, scraping, and synthesizing complex web data. The system utilizes a swarm of specialized agents to filter noise and generate concise, executive-level summaries in real-time

Speech Recognition and Synthesis System

- **Technology:** GPT-2, OpenAI API, Speech Recognition
- **Impact:** Built a high-fidelity Speech-to-Speech pipeline achieving a **98% Word Error Rate** (WER) accuracy. Integrated seamless context-awareness to facilitate fluid, human-like conversations across English, Spanish, and French

Sports Image Classification

- **Technology:** TensorFlow, Convolutional Neural Networks (CNN)
- **Impact:** Designed a high-performance computer vision model for real-time sports analysis. achieved **92% classification accuracy** through advanced transfer learning techniques and data augmentation strategies

Education

Bachelor of Engineering in AIML(Artificial Intelligence and Machine Learning)
AMC Engineering College, Bangalore (2020–2024)

- **CGPA**: 8.06/10

Certifications

AWS

- Machine Learning Foundation
- Cloud Foundations

Infosys

- Introduction to Data Science
- Basics of Python

Udemy

- Python for Deep Learning & Building Neural Network

Achievements & Contributions

- **Stanford University DeepLearning.AI Machine Learning Specialization** – Certified in supervised learning, unsupervised learning, reinforcement learning, and advanced ML algorithms.
- **Omdena Local Chapter Challenge Contributor** – Developed an AI-powered mobile application for crop disease detection in Kenyan smallholder farms, optimized for offline functionality and rapid performance.