LEBI RAJA C

AI Engineer | Machine Learning Specialist | Data Science Enthusiast

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PROFESSIONAL SUMMARY

Artificial Intelligence & Data Science student with hands-on experience designing and deploying intelligent systems — including Retrieval-Augmented Generation (RAG) pipelines, Large Language Model (LLM) fine-tuning, and Computer Vision applications. Proficient in Python, Java, and modern AI/ML frameworks, with a consistent record of shipping production-ready, user-centric products. Passionate about building scalable AI technologies that solve real-world problems.

EDUCATION

Bachelor of Technology — Artificial Intelligence & Data Science 2024 – 2028
Karunya Institute of Technology and Sciences, Coimbatore

Higher Secondary Education (Class XII) 2022 – 2024
Achyuta Academy School

TECHNICAL SKILLS

Programming Languages:	Python, Java, JavaScript, SQL, C, C++
AI / ML & LLM Frameworks:	PyTorch, Hugging Face Transformers, LangChain, Ollama, PEFT (LoRA), Scikit-learn, TensorFlow
Generative AI:	LLMs, RAG Architecture, LoRA Fine-Tuning (SFT), Prompt Engineering, Embeddings, Vector Databases (ChromaDB)
Computer Vision:	OpenCV, MediaPipe, CNN-based Image Classification
Data & Analytics:	Pandas, NumPy, Matplotlib, Seaborn, Data Cleaning, Feature Engineering
DevOps & Cloud:	Git & GitHub, Docker, GitHub Actions (CI/CD), AWS, Linux, Shell Scripting
APIs & Integrations:	REST APIs, Telegram Bot API, GitHub API, Google Custom Search API, GNOME Shell Extensions, MCP
Document Processing:	PyMuPDF, PDF Parsing, Text Extraction Pipelines, Streamlit

WORK EXPERIENCE

Technical Lead — Build Club Jul 2025 – Jan 2026
IITM Incubation Cell, IIT Madras Innovation Centre
- Led end-to-end technical development of AI/ML-based projects aligned with startup and incubation goals.
- Mentored team members on LLMs, RAG pipelines, and real-world AI system architecture.
- Architected scalable AI solutions integrating local and cloud-based LLMs for academic and industrial use cases.
- Conducted technical reviews, optimised model pipelines, and enforced production-level code quality standards.

Artificial Intelligence & Machine Learning Intern Jun 2025 – Jul 2025
Innovate Intern
- Developed a CNN-based model for leaf disease detection and classification, achieving high accuracy in real-time scenarios.
- Built Python-based ML workflows using Pandas, NumPy, and Scikit-learn; gained practical exposure to deployment challenges.
- Worked on applied AI/ML projects covering data preprocessing, model training, and performance evaluation.

Member — Build Club   Sep 2024 – May 2025
IITM Incubation Cell, IIT Madras Innovation Centre

- Contributed to cross-disciplinary teams designing intelligent hardware prototypes and AI-powered systems.
- Collaborated on projects merging software engineering with real-world hardware integration.

PROJECTS

ClarityMentor — Fine-Tuned Philosophical AI Mentor   *View Project*
Tech Stack: Qwen2.5-1.5B-Instruct, LoRA/PEFT, PyTorch, Hugging Face Transformers, BitsAndBytes (4-bit), SFT

- Fine-tuned a LoRA adapter on Qwen2.5-1.5B-Instruct to provide thoughtful philosophical mentorship and balanced life-guidance responses.
- Applied 4-bit quantisation (BitsAndBytes) with Supervised Fine-Tuning (SFT) to optimise model performance on constrained hardware.
- Published the adapter publicly on Hugging Face Hub for open community access and research use.

Dictator — Offline Voice-to-Text Desktop Utility   *View Project*
Tech Stack: Python, OpenAI Whisper, GNOME Shell Extension, PipeWire, JavaScript/CSS, CUDA

- Built a GNOME Linux desktop utility that captures voice and types transcribed text directly into any active application via a keyboard shortcut.
- Integrated OpenAI Whisper for fully local, privacy-preserving speech-to-text with optional GPU acceleration via CUDA.
- Shipped a GNOME Shell extension front-end with automated install scripts for one-command deployment.

Linux Voice Assistant — Voice-Activated Productivity Agent   *View Project*
Tech Stack: Python, OpenAI Whisper, SpeechRecognition, PyAudio, OS/subprocess, TTS Engine

- Developed a fully local Linux voice assistant for opening apps, running web searches, and controlling system functions via natural speech.
- Minimised cloud dependency using on-device Whisper recognition and subprocess-based OS command execution.

Plugin — Modular LLM Plugin Framework   *View Project*
Tech Stack: Python, LLM Integration Hooks, Dynamic Plugin Architecture, API Modules, File I/O

- Designed a flexible framework to extend LLM capabilities by dynamically loading and executing user-defined custom plugins.
- Enabled models to connect to external APIs, perform domain-specific tasks, and process structured data beyond plain text generation.

DataBoy — AI-Powered Telegram Data Cleaning Bot   *View Project*
Tech Stack: Python, Telegram Bot API, Pandas, NumPy, Ollama (Local LLM), Streamlit

- Built a Telegram bot that accepts messy CSV/Excel uploads and returns cleaned, validated datasets using LLM-powered analysis.
- Implemented intelligent handling of missing values, formatting inconsistencies, and data standardisation via Pandas + Ollama.
- Eliminated the need for users to write code by delivering data preprocessing through a simple conversational chat interface.

CERTIFICATIONS

- **AWS Academy Cloud Foundations** — AWS Academy
- **Generative AI for Beginners** — Great Learning Academy
- **Exploratory Data Analysis** — Infosys Springboard