

EXECUTIVE SUMMARY

AI & Machine Learning Engineer with hands-on experience building production-ready GenAI and ML systems. Skilled in developing RAG pipelines, LLM-powered assistants, and AI-driven backend services using Python, FastAPI, LangChain, MongoDB, and PyTorch. Proven ability to integrate computer vision, vector databases, and intelligent automation to solve real-world problems. Passionate about designing scalable, efficient, and deployable AI solutions with clean architecture and performance optimization.

TECHNICAL SKILLS

AI & ML: CNN, RNN, LSTM, GAN, Machine Learning, LLMs, LoRA, PEFT, Model Training & Optimization

LLM Systems: Generative AI, Agentic AI, LangChain, LangGraph, RAG, Prompt Engineering, Embeddings, Vector Search

Frameworks & Libraries: Hugging Face Transformers, PyTorch, Scikit-Learn, OpenCV, YOLO

Databases & Storage: MongoDB (Document Store, Vector Search), SQL, File-based Vector Stores

Backend & APIs: FastAPI, REST APIs, Streamlit, Flask, Authentication & API Integration

Data Handling & Processing: Pandas, NumPy, OCR, PDF & Document Processing

DevOps & Tools: Git, GitHub, Docker, VS Code, Jupyter Notebook, AWS

WORK EXPERIENCE

Mar 2025 – Jun 2025

AI/ML Developer Intern – CubeAI Solutions | Stipendiary Internship |[Link](#)

- Developed AI-driven automation for construction procurement and on-site operations.
- Built FastAPI-based backend services for purchase orders, batch slips, and invoice workflows.
- Designed a LangChain-based LLM assistant for intelligent document querying and workflow automation.
- Contributed to YOLO-based material detection and analytics dashboards for real-time insights and decision support.
- Tech Stack:** Python, FastAPI, LangChain, MongoDB, LLMs, YOLO, REST APIs

PROJECTS

Finance Agent AI |[Link](#)

Aug 2025 – Oct 2025

- Built an AI-powered stock analysis system delivering real-time insights and financial metrics.
- Developed a FastAPI backend with interactive dashboards for market trend visualization.
- Implemented intelligent data parsing and structured AI responses for reliable decision support.
- Tech Stack:** Python, FastAPI, LLMs, Chart.js, HTML, CSS, JavaScript

AI Food Analyser |[Link](#)

Feb 2025 – Mar 2025

- Developed an AI-based food recognition system using computer vision.
- Generated nutritional analysis and personalized meal recommendations from food images.
- Integrated ingredient-based recipe suggestions with smart cooking guidance.
- Tech Stack:** Python, OpenCV, YOLO, Machine Learning Models

Book Recommendation System |[Link](#)

Jul 2024 – Aug 2024

- Built a personalized recommendation engine using collaborative filtering techniques.
- Designed and deployed a Flask-based web application with a responsive user interface.
- Improved recommendation accuracy through user preference analysis.
- Tech Stack:** Python, Scikit-Learn, Pandas, Flask, HTML, CSS, JavaScript

CERTIFICATIONS

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| • MongoDB Skill Badge – Building RAG Apps Using MongoDB Link | Jan 2026 |
| • Coursera (AWS x DeepLearning.AI): Generative AI with Large Language Models Link | Oct 2025 |
| • Kaggle: Computer Vision Certification Link | May 2025 |
| • NVIDIA DLI: Getting Started with AI on Jetson Nano Link | Jan 2025 |
| • NPTEL: Introduction to Programming in C (Elite + Silver) Link | Apr 2024 |
| • LinkedIn Learning: Learning Data Science – Understanding the Basics Link | Apr 2024 |

EDUCATION

B.E. Computer Science and Engineering (AI & ML)

Dr. Mahalingam College of Engineering and Technology

2023 – 2027 | CGPA: 8.4

ACHIEVEMENTS

- Winner – Smartathon 2024: AI-based Innovation Challenge
 - Technofete 2025: 3× First Prizes & 1× Second Prize in AI and Automation events
 - Winner – Web Designing Contest (Hilaricas 2024)
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SOFT SKILLS

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| • Leadership | • Collaboration | • Problem Solving |
| • Documentation | • Innovation Mindset | • Research Aptitude |
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EXTRACURRICULAR ACTIVITIES

- Active member – Youth Red Cross (YRC); participated in blood donation camps and community drives.
- Organized and volunteered in college AI workshops and hackathons.
- Competed in inter-college AI/ML and web development challenges.
- Advocate for Responsible & Ethical AI initiatives.