

MEGAVARSHAN A

Chennai, TN, India | megavarshan1616@gmail.com | +91 73058 70441

LinkedIn: [linkedin.com/in/megavarshan](https://www.linkedin.com/in/megavarshan) | GitHub: github.com/Megavarshan |

Portfolio: megavarshan.vercel.app

PROFESSIONAL SUMMARY

AI undergraduate specializing in Deep Learning, Computer Vision, Large Language Models (LLMs), and Generative AI. Selected for **Amazon ML Summer School 2026**, with experience designing, training, fine-tuning, evaluating, and deploying production-ready AI systems using Python, PyTorch, Hugging Face, FastAPI, and cloud technologies. Experienced in building production-ready deep learning, computer vision, and LLM systems across healthcare, geospatial intelligence, and enterprise AI domains.

EDUCATION

Bachelor of Technology in Artificial Intelligence

2023 – 2027

SRM Institute of Science and Technology, Chennai

CGPA: 8.05/10

SKILLS

Programming Languages: Python, Java, C++, SQL

Core Computer Science: Data Structures & Algorithms (DSA), Object-Oriented Programming (OOP)

Machine Learning & AI: Machine Learning, Deep Learning, Computer Vision, Natural Language Processing (NLP), Transformers, Generative AI, Large Language Models (LLMs), Fine-Tuning, LoRA, Explainable AI

LLM & Generative AI: Retrieval-Augmented Generation (RAG), Prompt Engineering, Embeddings, Semantic Search, Hugging Face, Vector Databases

Frameworks & Libraries: PyTorch, TensorFlow, Scikit-learn, OpenCV, Matplotlib, Seaborn

Backend, Cloud & Deployment: FastAPI, REST APIs, Docker, AWS (EC2, Lambda, Bedrock, SageMaker), Firebase, Model Deployment, CI/CD

Data Engineering & Databases: Data Processing, ETL Pipelines, Data Analytics, Power BI, Apache Spark, PySpark, PostgreSQL

Software Engineering Tools: Git, GitHub, Linux, Software Development Life Cycle (SDLC)

EXPERIENCE

AI Research Intern

Jun 2025 – Dec 2025

National Institute of Technology (NIT), Trichy

- Designed and implemented an end-to-end AI pipeline integrating ConvNeXt, transfer learning, multi-scale feature extraction, structured metadata processing, and automated inference workflows for skin lesion analysis across **10,015 dermoscopic images** spanning **7 diagnostic classes**.
- Built scalable data preprocessing, model evaluation, benchmarking, and deployment-ready inference pipelines with explainability, threshold calibration, and reliability optimization techniques, achieving **91% classification accuracy** while improving prediction consistency for real-world AI applications.

Computer Vision AI Developer Intern

Dec 2025 – Jan 2026

InfiniTraq AI (By Griffin AI)

- Developed production-oriented AI analytics pipelines using YOLOv8, MiVOLO, MobileNetV2, and DeepFace for automated visual intelligence, processing **66,974 images** across **16 age-gender categories** with scalable data handling and AWS-based workflows.
- Optimized AI inference services through model benchmarking, latency optimization, and performance tuning, reducing inference latency by **30%** while improving scalability and deployment readiness for production AI systems.

- Engineered a Generative AI pipeline using Stable Diffusion, ControlNet, LoRA fine-tuning, and deep learning models to build automated image generation and transformation workflows using **10,000 facial images** across **100 identities**.
- Developed scalable AI services integrating model optimization, inference acceleration, and deployment pipelines using PyTorch and ONNX Runtime, reducing computational requirements by **60%**.
- **Research Tools & Technologies:** Stable Diffusion, ControlNet, LoRA, PyTorch, ONNX Runtime, FastAPI.

PROJECTS

Decision-Admissibility Disaster Intelligence Platform (DADIP)



- Architected a novel **Decision-Admissibility Driven Cognitive Architecture** integrating supervised reliability learning, contrastive representation learning, and Mahalanobis-based distribution shift detection across **6,237** disaster instances with **8** multimodal environmental features, reducing unsafe operational decisions by **46%**.
- Engineered a production-ready AI platform using **Llama 3.3**, **FastAPI**, and **PostgreSQL**, integrating real-time geospatial, meteorological, and infrastructure intelligence with multimodal reasoning, explainable risk assessment, and structured decision-support workflows, achieving **69.23%** operational coverage.

AI-Native CRM Platform



- Built an AI-powered enterprise CRM system using FastAPI, PostgreSQL, Redis, Celery, and Groq Llama 3.3, integrating LLM-powered assistants, LLM-powered workflows, natural language querying, customer segmentation, and personalized recommendation generation across **500+ customer profiles**.
- Engineered intelligent automation pipelines with LLM-assisted workflows, event-driven processing, customer lifecycle analytics, and workflow orchestration to enable AI-driven business decision support.

Multilingual NLP Analysis



- Developed NLP pipelines using Hugging Face Transformers to evaluate multilingual LLM models across **13 Indian languages** for sentiment analysis, toxicity detection, and low-resource language understanding.
- Implemented text preprocessing, embeddings, tokenization, model fine-tuning, and evaluation pipelines while benchmarking IndicBERT, MuRIL, XLM-RoBERTa, and mBERT for multilingual AI systems.

GLOBAL CERTIFICATIONS & ACHIEVEMENTS

Certifications:

- [Microsoft Certified: Azure AI Engineer Associate](#)
- [Oracle Cloud Infrastructure 2025 Certified Generative AI Professional](#)
- [Agentic AI Certified Foundations Associate](#)
- [Oracle AI Vector Search Certified](#)
- [AWS Certified Cloud Practitioner](#)

Achievements:

- Selected for **Amazon ML Summer School 2026** among the top 3,000 candidates.
- Awarded **Silver Medal** (University Level) at **SRM Research Day 2026** for the *Decision-Admissibility Driven Cognitive Architecture for Reliable Multimodal Intelligent Systems* research project.
- Top 10 Finalist, **Infosys Techzooka – PALS IITM Hackathon 2025**.