



GARIMA SWAMI

SOFTWARE DEVELOPER | AI ENGINEER

Cottbus, Germany | Garimaswami646@gmail.com |

[linkedin.com](https://www.linkedin.com) | [GitHub](https://github.com) | [Portfolio - garimaswami](https://portfolio-garimaswami.com)

EDUCATION

M.Sc. in Artificial Intelligence

10/2025 - Present

Brandenburgische Technische Universität | Germany

B.Sc. in Computer Science

M.S. Ramaiah University of Applied Sciences | Bengaluru, India

2021 - 2024

- GPA: 1.9/4.0

WORK EXPERIENCE

Software Developer | CodingPro | Bengaluru, India

07/2024 – 04/2025

- Developed Python-based internal tools and backend components for AI-driven platform systems.
- Built automation workflows using Python and REST APIs, improving operational efficiency by ~25%.
- Designed modular software components following object-oriented design principles.
- Collaborated within agile development teams delivering scalable software features.

Software Developer | Indian Space Research Organisation | Bengaluru

02/2024 – 05/2024

- Developed engineering reliability analysis software for satellite subsystems using Linux-based environments.
- Built automated analysis pipelines and reporting systems from engineering master libraries.
- Implemented simulation-style failure modelling logic for subsystem reliability evaluation.
- Designed backend logic and structured data processing workflows in Java.
- Contributed to technical software supporting aerospace engineering analysis.

Full Stack Intern | Municipal Corporation of Delhi | Delhi, India

06/2023 – 07/2023

- Developed frontend components and databases for waste-clearing survey applications.
- Contributed to smart urban waste management solutions using Java, IoT, GIS, and geotagging.

PROFESSIONAL SKILL

AI Engineering & Machine Learning : Python, PyTorch, TensorFlow, scikit-learn, Hugging Face, NLP, Large Language Models (LLMs), Prompt Engineering, Retrieval-Augmented Generation (RAG), Computer Vision, Model Training & Evaluation

Data Science : NumPy, pandas, SciPy, Data preprocessing, Feature engineering, Statistical analysis

Software Engineering : Java, JavaScript, REST APIs, Object-Oriented Programming, Linux, Software Development

MLOps & Deployment : Docker, Git, GitHub, CI/CD, AWS (SageMaker), Model deployment basics

Databases & Visualization & Tools : SQL, MySQL, Matplotlib, Seaborn, Jupyter Notebook

PROJECTS | Github

End-to-End ML Deployment Pipeline (MLOps)

- Built end-to-end ML pipeline (preprocessing, training, evaluation, deployment) using Python, PyTorch/scikit-learn
- Developed FastAPI REST API for scalable model inference. Containerized with Docker and integrated CI/CD automation
- Deployed scalable inference endpoint on AWS SageMaker with monitoring

Enterprise Knowledge Assistant (RAG System)

- Developed LLM-based RAG system using Hugging Face and FAISS/ChromaDB
- Built hybrid semantic + keyword retrieval pipeline. Implemented document ingestion with chunking and metadata indexing.
- Created FastAPI backend for real-time querying
- Containerized deployment with Docker and performance evaluation setup

PUBLICATIONS

- Early detection of dyslexia Using Multimodal Analysis, INCOFT, 2025
- WeSAFE : Enhancing Human Security Mobile Application, IJIRCCE, 2023