



# GARIMA SWAMI

## SOFTWARE DEVELOPER | AI ENGINEER

Cottbus, Germany | [Garimaswami646@gmail.com](mailto:Garimaswami646@gmail.com) |

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

### EDUCATION

M.Sc. in Artificial Intelligence Brandenburgische Technische Universität   Germany	10/2025 - Present
B.Sc. in Computer Science M.S. Ramaiah University of Applied Sciences   Bengaluru, India	2021 - 2024
<ul style="list-style-type: none"><li>GPA: 1.9/4.0</li></ul>	

### WORK EXPERIENCE

<b>Software Developer   CodingPro   Bengaluru, India</b>	07/2024 – 04/2025
<ul style="list-style-type: none"><li>Developed Python-based internal tools and backend components for AI-driven platform systems.</li><li>Built automation workflows using Python and REST APIs, improving operational efficiency by ~25%.</li><li>Designed modular software components following object-oriented design principles.</li><li>Collaborated within agile development teams delivering scalable software features.</li></ul>	
<b>Software Developer   Indian Space Research Organisation   Bengaluru</b>	02/2024 – 05/2024
<ul style="list-style-type: none"><li>Developed engineering reliability analysis software for satellite subsystems using Linux-based environments.</li><li>Built automated analysis pipelines and reporting systems from engineering master libraries.</li><li>Implemented simulation-style failure modelling logic for subsystem reliability evaluation.</li><li>Designed backend logic and structured data processing workflows in Java.</li><li>Contributed to technical software supporting aerospace engineering analysis.</li></ul>	
<b>Full Stack Intern   Municipal Corporation of Delhi   Delhi, India</b>	06/2023 – 07/2023
<ul style="list-style-type: none"><li>Developed frontend components and databases for waste-clearing survey applications.</li><li>Contributed to smart urban waste management solutions using Java, IoT, GIS, and geotagging.</li></ul>	

### PROFESSIONAL SKILL

<b>AI Engineering &amp; Machine Learning</b> : Python, PyTorch, TensorFlow, scikit-learn, Hugging Face, NLP, Large Language Models (LLMs), Prompt Engineering, Retrieval-Augmented Generation (RAG), Computer Vision, Model Training & Evaluation
<b>Data Science</b> : NumPy, pandas, SciPy, Data preprocessing, Feature engineering, Statistical analysis
<b>Software Engineering</b> : Java, JavaScript, REST APIs, Object-Oriented Programming, Linux, Software Development
<b>MLOps &amp; Deployment</b> : Docker, Git, GitHub, CI/CD, AWS (SageMaker), Model deployment basics
<b>Databases &amp; Visualization &amp; Tools</b> : 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](#)