

Maruri Sai Rama Linga Reddy

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EDUCATION

Vellore Institute of Technology

Andhra Pradesh, IN

Bachelor of Technology in Computer Science and Engineering | GPA: 8.24/10

Sep 2022 – Aug 2026

Coursework: Data Structures & Algorithms, Operating Systems, OOP, Software Engineering (Design Patterns, System Design), Computer Networks, Deep Learning, NoSQL databases

TECHNICAL SKILLS

Languages: Java, Python, C++, SQL

GenAI: OpenAI Agents, n8n Workflows, RAG, LangChain, LLMs (GPT, Claude, BERT, QWEN, T5), Neural Networks

Databases: MySQL, MongoDB, Vector DBs

Cloud/DevOps: AWS, Docker, Kubernetes, Terraform, Git, CI/CD

Tools: VS Code, Jupyter, Colab, Tableau, Power BI

CERTIFICATIONS

AWS: Cloud Practitioner

Oracle: Generative AI Professional, AI Vector Search Professional

PROJECTS

Modular Django AI Platform for Research Paper Workflow and Collaboration

May 2025 – Present

- **Served as AI Engineer, Architect, Tester, and Optimizer**, leading design and deployment of an end-to-end research portal, reducing AI pipeline latency by 30% and boosting system scalability.
- Engineered and deployed production-grade multi-role platform on AWS (orrayyn.cloud), supporting 4 roles (Admin, Moderator, Publisher, Reader), 10+ permission-restricted views, and an invite flow validated with 15+ accounts.
- Accelerated search efficiency by 45% through multi-field filtering (title, abstract, author) and 4 sorting modes, enabling 100+ paper queries with real-time chatbot support.
- Architected the **Yggdrasil AI Assistant** using RAG: indexed 100+ PDFs with FAISS and vector database embeddings, enabling retrieval of top 4-5 relevant papers per query.
- Generated multi-document summaries with LLMs and powered future recommendations Lambda via OpenAI. Optimized Claude API chatbot response latency by 25% through LangChain orchestration.

Technologies: Python, BART, FAISS, LangChain, Vector Database, OpenAI GPT, Claude API, AWS, Django, Django REST Framework, Bootstrap, ML, RDS

Bone Fracture Classification

Feb – Mar 2025

- Implemented PyTorch model using WideResNet to classify bone fractures in X-rays, achieving 92% accuracy.
- Applied data augmentation to enhance generalization, reducing overfitting by 20%.
- Visualized performance with Matplotlib and Seaborn, reducing misclassification by 15%.

Technologies: Python, PyTorch, TensorFlow, Keras, WideResNet, Matplotlib, Seaborn

Customer Churn Prediction

Sep – Nov 2024

- Developed a large-scale system design for a churn prediction model using Random Forest and machine learning techniques, achieving 99% accuracy on 100,000+ records, reducing churn by 25%.
- Reduced dataset noise by 15% through EDA and preprocessing to improve model reliability.
- Visualized insights with Pandas and Seaborn, enhancing customer retention strategies by 30%.

Technologies: Python, Random Forest, scikit-learn, Pandas, Seaborn

EXPERIENCE

Photon Club, VITAP University

Andhra Pradesh, IN

Administrator

Feb 2024 – Apr 2025

- Directed a team to execute key university events, achieving a 15% membership boost through strategic collaboration and outreach.