

Mrinali Charhate

Mumbai, India

mrinalicharhate@gmail.com +91 8104158875 **Portfolio:** [mrinali-charhate.vercel.app](#) **LinkedIn:** [Mrinali Charhate](#)

Education

Vellore Institute of Technology, Vellore

2023 – Present

BTech in Computer Science and Engineering (Information Security)

- CGPA: 9.01/10.0

Apeejay School Nerul

2020 – 2023

Secondary Education

Experience

AI-ML Intern

Mumbai, Maharashtra

Reliance - New Energy

June 2025

- Collaborated with teams to gather requirements and tailor solutions for energy data systems.
- Built and evaluated hybrid retrieval models for accurate domain-specific queries.
- Presented insights via dashboards and demos to support data-driven decisions.
- Refined extraction logic and validation rules for solar generation reports.

Senior Core Member

Vellore, Tamil Nadu

IEEE-CS VIT

March 2025 – Present

- Contributed to the design domain of IEEE-CS, specializing in the UI/UX subdomain.
- Played a key role in the redesign of the main website, enhancing user navigation and overall experience.
- Led the UI/UX design efforts for flagship event websites, creating visually appealing and user-friendly interfaces.

Projects

Skill Decay Tracker (AWS-Based)

[SkillForge](#) 

- Designed a serverless pipeline using AWS components to process skill-decay metrics reliably.
- Automated ingestion and transformations to maintain real-time data quality with minimal upkeep.
- Improved consistency by integrating validation checks across distributed processing workflows.

Video Frame Reconstruction using Graph Optimization

[Video Reconstructor](#) 

- Built a system to reorder jumbled frames using similarity scoring and MST logic.
- Ensured accurate reconstruction through graph-based modeling and optimized similarity matching steps.
- Enhanced processing throughput by refining ordering methods across high-volume frame inputs.

Solar Energy RAG System

- Built a hybrid RAG system combining embeddings and stats for solar-data insights.
- Implemented a PDF-to-vector pipeline enabling accurate retrieval for domain-specific queries.
- Improved reliability by pairing structured analysis with LLM-based reasoning components.

Skills

Languages: Python, C, C++, R, JavaScript, HTML, CSS


Frameworks: React.js, Express.js, Node.js, TensorFlow, PyTorch, OpenCV, NumPy, Pandas, Bootstrap

Soft Skills: Leadership, Collaboration, Public Speaking, Adaptability, Time Management.

Languages Known: English, Hindi and Marathi.

Certifications

IBM Gen-AI [IBM GEN-AI Certificate](#) 

Supervised Machine Learning (Stanford/DeepLearning.AI) [Supervised Machine Learning Certificate](#) 

Advanced Learning Algorithms (Stanford/DeepLearning.AI) [Advanced Learning Algorithms Certificate](#) 