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[Github](#) | [LinkedIn](#) | [ResearchGate](#)

EDUCATION

- Indian Institute of Technology Patna (IITP)** Patna, IN
Master of Technology in Artificial Intelligence
Jul 2024 – Present
- G H Rasoni College of Engineering, Nagpur (GHRCE)** Nagpur, IN
Bachelor of Technology in Electronics Engineering, Minor in Computer Science and Engineering
Dec 2021 – Jun 2024
- Government Polytechnic Nagpur (GP Nagpur)** Nagpur, IN
Diploma in Electrical Engineering
Jul 2018 – Jul 2021

EXPERIENCE

- Indian Institute of Technology Patna (IITP)** Patna, IN
Teaching Assistant
Jan 2025 – Present
 - Currently working as a Teaching Assistant (TA) for CS 431: Big Data Analytics and Lab, Department of Computer Science and Engineering, IIT Patna, during Autumn Semester 2025, responsible for assisting in lab sessions, grading, and mentoring students in distributed data processing and analytics concepts, including MySQL (SQL), Apache Spark, and Hadoop.
 - Worked as a Teaching Assistant (TA) for CS 1201: Data Structure and Lab, Department of Computer Science and Engineering, IIT Patna, during Spring Semester 2025, supporting instructional delivery, conducting lab sessions, and evaluating student implementations of data structures.
- Visvesvaraya National Institute of Technology Nagpur (VNIT)** Nagpur, IN
Research Intern
Jan 2024 – Jul 2024
 - Published a peer-reviewed conference paper in Springer CCIS (PCEMS 2024), developing a multi-feature reinforcement learning framework combining candlestick patterns and fundamental metrics with GRU and DQN models to generate profitable buy/sell/hold signals on Indian and U.S. equities. [\[Springer Conference Paper Link\]](#)
 - Contributed an accepted (forthcoming) book chapter on mobility and autonomous driving using quantum-inspired intelligence, underscoring expertise in data-driven research and technical writing.
- Visvesvaraya National Institute of Technology Nagpur (VNIT)** Nagpur, IN
Summer Research Intern
Jun 2023 – Jul 2023
 - Developed and optimized deep learning models for rainfall-runoff prediction, streamlining data workflows and advancing hydrological forecasting research in a fast-paced academic setting.
 - Co-authored a peer-reviewed book chapter in Applications of Machine Learning in UAV Networks (IGI Global, 2024) on forest fire prediction using UAV-based data and ML/DL techniques, demonstrating expertise in applied AI research and technical writing. [\[Book Chapter Link\]](#)
- G H Rasoni College of Engineering, Nagpur (GHRCE)** Nagpur, IN
Data Science Intern (Center of Excellence)
Aug 2022 – Nov 2022
 - Published at IEEE ICCNT 2023 on global sea level prediction using Python ML models (linear regression + gradient descent), achieving 30% higher accuracy and 50% faster runtime. [\[Conference Paper Link\]](#)

PROJECTS

- Aether Marketing System** [\[GitHub\]](#)
AI-powered dynamic ad generation and optimization system
 - Built an end-to-end MLOps system for personalized ad generation using K-Means clustering and Gemini 2.5 Pro API, with a scalable backend powered by FastAPI, Celery, Redis, and PostgreSQL.
 - Implemented CI/CD automation with GitHub Actions, containerized deployment using Docker and Kubernetes, and a feedback loop for continuous optimization and re-training.
 - Tools & technologies used:** FastAPI, Celery, PostgreSQL, Redis, Scikit-learn, Pandas, Docker, Kubernetes, Poetry, Pytest, Gemini 2.5 Pro API
- CuisineInsight Q&A** [\[GitHub\]](#)
Built a system for restaurant queries using Yelp dataset
 - Developed a Python-based Retrieval-Augmented Generation (RAG) system for restaurant queries on a Yelp dataset (10,000+ reviews), leveraging LangChain for orchestration, deployed with Flask, and optimized on PyTorch/CUDA.
 - Engineered sentiment analysis with TF-IDF and logistic regression (91% accuracy), integrating 'llama3.2:3b' LLMs and 'nomic-embed-text:v1.5' embeddings via Ollama for NLP tasks. Implemented Chroma vector search (Precision@5: ~0.6–0.8) and documented with Flask app screenshots on GitHub.
 - Tools & technologies used:** Python, Flask, TF-IDF, Chroma, LLMs, PyTorch, CUDA, Pandas, Ollama
- Multi-User PDF Q&A** [\[GitHub\]](#)
Built a PDF Q&A app with Streamlit and FAISS
 - Built multi-user PDF Q&A app with Streamlit, FAISS vector search, and Gemini 1.5 Flash API.
 - Managed scalable Redis storage for embeddings, text chunks, and NLP-driven chat history.
 - Deployed app on Kubernetes/Docker, integrating PyPDF2, sentence-transformers, and torch for PDF processing.
 - Tools & technologies used:** Streamlit, FAISS, Redis, Gemini API, Docker, Kubernetes, PyPDF2, torch, sentence-transformers

CERTIFICATIONS

- Oracle Cloud Infrastructure 2025 Certified Generative AI Professional [\[credentials\]](#)
- Oracle Cloud Infrastructure 2025 Certified Data Science Professional [\[credentials\]](#)
- Google Analytics Certification [\[credentials\]](#)