ROHAN BHATANE

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EDUCATION

Northeastern University; Masters of Science in Computer Science **09/2023 – 12/2025**
GPA: 3.83; Courses: Deep Learning, Programming Design Paradigm, ML, Statistics for Bioinformatics *Boston, MA*

Maharashtra Institute of Technology WPU, Bachelors of Technology in Computer Engineering **08/2019 – 05/2023**
GPA: 3.7; Courses: Mathematics, DSA, Machine Learning, Data Warehouse and Data Mining *Pune, MH*

EXPERIENCE

Renal Research Institute **06/2025 - 08/2025**
Data Science Intern *New York City, NY*

- Built dialysis nutrition app with personalized meal planning for strict renal diet requirements (protein/sodium/potassium limits)
- Deployed **agentic RAG/FAISS architecture** filtering 10,000+ recipes against patient-specific restrictions in seconds
- Leveraged **GPT-4o/GPT-4o-mini** for intelligent meal plan generation balancing medical and cultural needs
- Analyzed 115,110 dialysis patient records to predict **ICW/ECW/TBW** fluid measurements achieving **R^2 of 0.92**, providing BCM-equivalent capabilities for clinics where BCM machines are absent
- Applied **data preprocessing** and **feature engineering** on treatment data, deploying **XGBoost** model for BCM - equivalent fluid predictions

ADAIQ **07/2024 - 04/2025**
Generative AI Intern *Boston, MA*

- Built LLM-based AI models with tools for sentiment analysis, attribute scoring, and uncovering hidden feedback patterns to improve shoe product development decision speed by 75%
- Automated client-ready report generation with comparative insights across shoe models, integrating attribute scoring, visualizations, and key findings to eliminate manual report creation
- Enabled AI-driven 2D image-to-3D mesh generation for shoe components using a two-stage framework with **Zero123** and **MiDaS** on **V100 GPUs**, accelerating product development
- Collaborated on **CI/CD pipeline** development using **AWS Glue**, **Step Functions**, and **Athena** to integrate Generative Design and Insights Models into the data flow
- Built an analytics layer to display model outputs and visualizations in client-facing applications

Bizamica Software **03/2022 - 06/2022**
Machine Learning Intern *Pune, MH*

- Developed ML models in Python using **OpenCV**, **CNN**, and **Azure OCR** with NLP techniques (**POS**, **NER**) for advanced document image processing, including checkbox and radio button data extraction achieving 97% accuracy
- Integrated these ML and NLP capabilities into the **IZDOX platform**, boosting operational efficiency by 95% in automated PDF and scanned document processing workflows

PROJECTS

PlanMate | *React, NodeJS, MCP* **09/2025**

- Full-stack travel planning application that converts natural language requests into personalized itineraries with optimized routes, nearby events, and local attractions, eliminating manual research and planning that users would need to do across multiple platforms like Google Maps, Ticketmaster, and travel websites using **multi-agent** architecture

Image Processor | *Java, Java Swing* **12/2023**

- Developed scalable image processing software in Java using **MVC architecture** with **Java Swing** UI, implementing advanced features including compression, blur effects, image splitting, and RGB histogram plotting

Image Generation using CGAN | *Python, Tensorflow* **04/2024**

- Developed a **Conditional GAN** in TensorFlow to generate handwritten digit images, cutting misclassifications by 25% and boosting realism by 40%.

TECHNICAL SKILLS

Languages: Python, C++, Java, JavaScript, TypeScript, HTML, CSS, SQL
Libraries/Tools: AWS, MySQL, FAISS, Hugging Face, TF-Keras, PyTorch, OpenCV, Android Studio
Areas: Deep Learning, Agentic AI, RAG, LLMOps, Knowledge Graphs, Computer Vision
Certifications: AI Agents Course (Hugging Face), Neural Networks and Deep Learning, Applied ML, Introduction to Data science in python (Coursera)