

MOHITRAJSINH JADEJA

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B.Tech AI & ML student (graduating 2028) with hands-on experience in machine learning pipelines, cloud infrastructure, and AI security. Skilled in building end-to-end ML systems from data preprocessing to deployment. Proficient in Python, XGBoost, TensorFlow, and Scikit-learn. Seeking to deepen ML expertise through Amazon ML Summer School 2026.

EDUCATION

B.Tech — Artificial Intelligence & Machine Learning	<i>Jun 2025 – Jul 2028</i>
Marwadi University, Rajkot, Gujarat Expected Graduation: 2028	
Diploma — Computer Science	<i>Aug 2022 – May 2025</i>
Marwadi University, Rajkot, Gujarat CGPA: 8.76 / 10	

TECHNICAL SKILLS

Languages:	Python, JavaScript, TypeScript, SQL
ML / AI:	XGBoost, Scikit-learn, TensorFlow, Deep Learning, NLP, Transfer Learning, Feature Engineering, Grad-CAM, Bias Detection
Frameworks:	FastAPI, Node.js, React, REST APIs, Redis, MongoDB, WebSockets
Cloud & Infra:	AWS (EC2, S3), Google Cloud Platform, BigQuery, Vertex AI, Docker, Kubernetes
DevOps / Tools:	GitHub Actions, Git, Linux, Jupyter, Postman, VS Code, CI/CD Pipelines
AI Security:	PII Detection, Prompt Injection Protection, Adversarial ML, LiteLLM, Microsoft Presidio

EXPERIENCE

AI/ML Intern — Qtonz Infosoft Pvt. Ltd.	<i>May 2026 – Jun 2026</i>
- Led Caller-ID spam detection R&D: designed and trained XGBoost classifier on call metadata features (call frequency, duration patterns, number reputation), achieving significant improvement in spam classification accuracy. - Engineered end-to-end ML pipeline covering data preprocessing, feature engineering, model training, hyperparameter tuning, and evaluation using cross-validation and ROC-AUC metrics. - Served as AI/ML Team Lead — coordinated team activities, conducted requirement analysis, and delivered project presentations to mentors and cross-functional stakeholders. - Explored multi-model approaches (Logistic Regression, Random Forest, XGBoost) with comparative benchmarking to select optimal classifier for production deployment.	
Google Cloud Arcade Facilitator — Google Cloud Community India	<i>Jul 2024 – Nov 2024</i>
- Led cloud learning initiative reaching ~2,000 students across India; conducted workshops on GCP services including BigQuery, Vertex AI, and cloud deployments. - Drove measurable improvement in community certification completion rates through structured learning pathways and hands-on mentoring sessions. - Managed workshop materials and automated delivery using GitHub and CI/CD tooling.	
AWS Cloud Computing Intern — LinuxWorld Informatics Pvt. Ltd.	<i>May 2024 – Jul 2024</i>
- Managed AWS infrastructure (EC2, S3) and containerized deployments (Docker, Kubernetes); applied IAM policies, load balancing, and auto-scaling for optimized reliability. - Built and maintained CI/CD pipelines for infrastructure automation and service delivery in cloud-native environments.	

PROJECTS

Caller-ID Spam & Classification System | *Python · XGBoost · Scikit-learn · Pandas · FastAPI*

- Built a telecom spam detection system using XGBoost trained on call metadata features (frequency, duration, time-of-day patterns, number reputation scores) to classify spam and robocalls.
- Performed extensive feature engineering and preprocessing: encoded categorical variables, handled class imbalance via SMOTE, and applied cross-validation — achieving strong ROC-AUC on held-out test data.
- Benchmarked multiple classifiers (Logistic Regression, Random Forest, XGBoost) and selected XGBoost for best precision-recall trade-off; served model via FastAPI REST endpoint for real-time inference.

Brain Tumor Detection System | *Python · TensorFlow · ResNet50 · Grad-CAM*

- Achieved 78.6% MRI classification accuracy using CNN with ResNet50 transfer learning and advanced data augmentation on medical imaging dataset.
- Integrated Grad-CAM visualizations for model interpretability, making predictions auditable and explainable for clinical review.

AIRMS — AI Risk Management System | *Python · FastAPI · Microsoft Presidio · Redis · LiteLLM*

- Built AI security middleware with bidirectional PII tokenization, adversarial prompt injection detection, and dynamic policy enforcement across multi-provider LLM routing.
- Architected production-ready security gateway with Redis-backed rate limiting, structured audit logging, and risk classification pipeline.

FairSight Core — Bias Detection Platform | *Python · Scikit-learn · FastAPI · React · D3.js*

- Built cloud-native fairness analysis platform computing demographic parity, disparate impact, and intersectional bias metrics across ML model outputs.
- Surfaced mitigation insights via interactive D3.js dashboard; deployed using Dockerized microservice architecture with REST API integration.

Social Network Analysis System | *Python · NetworkX · D3.js · React*

- Developed graph analytics platform with community detection, centrality analysis, and shortest-path algorithms; built real-time D3.js visualization for dynamic large-scale network exploration.

CERTIFICATIONS & ACHIEVEMENTS

- Develop GenAI Apps with Gemini and Streamlit — Google | Jun 2025
- Arcade Facilitator Program — Google Cloud Skills Boost | Oct 2024 | Credential: xaxF6V8QWmc2
- Community & Cloud Day (CCD 2025) — Google Developers Group | May 2025