

Education

• Nirman High School — Secondary (CBSE) Ahmedabad, Gujarat	2012 - 2020
• Puna International School — Senior Secondary (CBSE) Ahmedabad, Gujarat	2020 - 2022
• Kalinga Institute of Industrial Technology (KIIT) — B.Tech in Computer Science Bhubaneswar, Odisha	2022 - 2026

Work Experience

1. **Katch GO | AI/ML Intern** June 2025 - Present
- Designed XGBoost-based forecasting pipelines to predict daily ridership and revenue, achieving **under 3% average prediction error**.
 - Developed a **Computer Vision solution** using **YOLO-v8** for automated passenger counting, enabling accurate monitoring of bus occupancy in real time.

Achievements & Leadership Roles

1. **Amazon ML Challenge 2025 | Smart Product Pricing (Top 2.73%)**
- Ranked **629th out of 23,000+ global teams** in Amazon's multimodal ML competition (SMAPE: 48.9%).
 - Built an end-to-end price prediction model combining **text (TF-IDF features)** and **image embeddings** for e-commerce products.
 - Trained and optimized **LightGBM regressor** using **Optuna**, integrating engineered linguistic and quantity-based features.
 - Demonstrated strong proficiency in **multimodal learning, feature engineering and model optimization** under real-world constraints.
2. **MIT Global AI Hackathon | Solo (Special Mention)**
- Shortlisted from a globally competitive pool of applicants to participate in a 24-hour AI hackathon hosted by MIT AI/ML Club.
 - Built a pipeline with **Hugging Face Diffusers, PyTorch3D and Trimesh** to convert 2D images to 3D exportable models.
 - Got a **special mention for "Relevant Approach"** for innovative solution and export ready .obj output.
3. **MIT Global AI Community Country Ambassador And Participant | Global AI Hackathon (2nd Edition)**
- Appointed **one of 50 global ambassadors for the 2nd Global AI Hackathon** and recognized among the **Top 3 globally for impact and outreach**.
 - Led outreach across **India with primary focus on Gujarat**, onboarding **7 engineering colleges and driving over 400 student registrations**.
 - Managed technical onboarding and resolved participant queries for the hackathon.
 - Shortlisted with a team from a **global pool of 2700+ applicants** to participate in the hackathon.

Projects

1. **Virtual Theremin | OpenCV, NumPy, SciPy [GitHub Link](#)**
- Simulated a musical instrument controlled by hand gestures using webcam-based tracking.
 - Generated sine waves in real-time; pitch and volume adjusted based on hand position.
2. **Sap-Chatflow | LLM, RAG, FullStack [GitHub Link](#)**
- Engineered a full-stack Conversational AI assistant (Llama 3.1/RAG, React/TS) to automate complex SAP workflows, enabling form submissions and providing real-time operational data (PO, Stock Levels) via a natural language chat interface.
 - Developed a Retrieval-Augmented Generation (RAG) architecture using a specialized knowledge base to ensure the LLM's responses were grounded and accurate for enterprise-level SAP terminology and business processes.
3. **GeoChallenge Game | Pandas, Geopy, TheFuzz [GitHub Link](#)**
- Created a geography quiz game with fuzzy matching.
 - Featured 3 dynamic game modes, country/capital guessing based on hints and finding all neighbours of a country with real-time geolocation and relational border data.

Further work showcased on my [GitHub](#)

Technical Skills

- **Languages:** Python, C, Java, SQL, HTML, CSS, TypeScript
- **Libraries & Frameworks:** NumPy, Pandas, scikit-learn, TensorFlow, PyTorch, Hugging Face Transformers, Git, Librosa, OpenCV, Matplotlib, Trimesh, TheFuzz, Geopy.
- **Tools & Platforms:** Jupyter Notebook, Google Colab, Power BI, Sounddevice, Gradio, FL Studio.
- **Cloud & DevOps:** AWS (EC2, S3, Lambda, VPC, Aurora, CloudWatch), GitHub.
- **Domains:** Machine Learning, Deep Learning, Computer Vision, Natural Language Processing, Data Analytics.
- **CS Fundamentals:** Operating Systems, Computer Networks, Software Engineering.

Certifications

- **Google AI Essentials Specialization: Google** August 2025
- Gained hands-on knowledge of AI fundamentals, prompt engineering, responsible AI practices and applied use cases for productivity.
- **IBM AI Product Manager Specialization: IBM** August 2025
- Learned to design, manage and deliver AI-powered products, covering product lifecycle, stakeholder collaboration and AI strategy.
- **Machine Learning: Columbia University** August 2025
- Completed a comprehensive course covering key ML concepts including Linear Regression, Data Classification, Clustering and Dimensionality Reduction.
- **Data Science: IBM** August 2025
- Covered applied machine learning, deep learning, cloud integration, and end-to-end data workflows, with hands-on projects in analysis, modeling and deployment.
- **Business Analytics for Decision Making: University of Colorado Boulder** January 2025
- Course focused on using data and analytical tools to inform strategic business decisions.
- **Strategy and Game Theory for Management: IIM Ahmedabad** January 2025
- Explored the principles of strategic thinking and game theory as applied to business management.