

C Harshavardhan Reddy

+91-9110337977 | challa.harshavardhan16@gmail.com | linkedin.com/in/igharsha7 | github.com/igharsha7
Hyderabad, Telangana, India

PROFESSIONAL SUMMARY

I'm a Computer Science undergraduate specializing in AI and Machine Learning, with hands-on experience in deep learning, computer vision, and full-stack development. I've led technical teams and mentored over 100 students through various campus initiatives. My projects include building and deploying ML applications using YOLOv8, GANs, and LLMs, with experience across PyTorch, TensorFlow, and cloud platforms like AWS and GCP. I enjoy working on end-to-end AI solutions — from training models to deploying them — and love collaborating with others to turn new ideas into real, impactful projects.

EDUCATION

GITAM (Deemed-to-be) University <i>Bachelor of Technology in Computer Science Engineering (AI & ML Specialization)</i> <ul style="list-style-type: none">CGPA: 8.20/10.0	Hyderabad, Telangana July 2023 – May 2027
Narayana Junior College <i>Intermediate - MPC (Mathematics, Physics, Chemistry)</i>	Hyderabad, Telangana 2021 – 2023
Matrusri DAV Public School <i>Class 10th</i>	Hyderabad, Telangana 2012 – 2021

TECHNICAL SKILLS

Languages: Python, JavaScript, C, SQL, HTML/CSS
Machine Learning/AI: TensorFlow, PyTorch, YOLOv8/v11, GANs, MediaPipe, Scikit-learn, Computer Vision, NLP, Prompt Engineering
Web Development: Next.js, React, Streamlit, Node.js, Tailwind CSS, Three.js, ShadCN
Tools & Platforms: Git/GitHub, Google Cloud Platform, MongoDB, AWS (S3, Rekognition), Firebase, Docker, Jupyter Notebook/Lab, VS Code, Linux, n8n, Vercel, LangChain, RAGs
Core Competencies: Deep Learning (LSTM, CNNs, GANs), Object Detection, Time Series Analysis, Data Visualization, Full-Stack Development

EXPERIENCE

President <i>GitHub Community, GITAM</i> <ul style="list-style-type: none">Leading campus-wide technical events and workshops, mentoring 100+ students in open-source contribution and collaborative developmentOrganizing hackathons and coding sessions to promote developer culture across the university	Aug 2025 – Present Hyderabad, India
Vice President <i>GitHub Community, GITAM</i> <ul style="list-style-type: none">Mentored freshers on core technical skills including Git, GitHub workflows, and software development best practicesDelivered technical workshops as speaker: Introduction to AI/ML with Python, SmolVLM (Vision-Language Models), Prompt Engineering, and Git Set Go (Version Control)	Jan 2025 – Aug 2025 Hyderabad, India
Project Member & Documentation Coordinator <i>Kad.AI</i> <ul style="list-style-type: none">Building AI-focused projects to increase club outreach and demonstrate practical AI applications to beginnersManaging comprehensive documentation including event proposals, technical reports, and post-event summaries	Oct 2024 – Present Hyderabad, India
AI/ML Team Lead <i>Google Developer Group on Campus, GITAM</i> <ul style="list-style-type: none">Led development of CNN-based handwritten digit recognition system using MNIST dataset (70,000 images)Deployed model with web interface for real-time predictions as part of Build with AI event	Oct 2024 – Jul 2025 Hyderabad, India

- Developed Siamese Neural Network for "Lost and Found" app achieving 93% validation accuracy for image matching

Coding Team Lead

Jul 2025 – Present

COGAAN Club

Hyderabad, India

- Organizing technical events and competitive programming sessions to enhance coding skills among 50+ members
- Conducting learning sessions on AI/ML, web development, and algorithmic problem-solving

Facilitator Participant

2024 – 2025

Google Cloud Arcade Facilitator Program

- Completed 70+ skill badges across Cloud Infrastructure, Machine Learning, Data Analytics, and AI domains

PROJECTS

ML Sandbox — LLM-Guided ML Playground | *Next.js, Flask, PyTorch, Gemini API* CSE Hackathon 2025

- Developed an LLM-powered platform automating end-to-end ML workflows from problem description to trained model
- Integrated Gemini API for natural language processing to enable intelligent model selection and dataset fetching
- Supported regression, classification, image recognition, and reinforcement learning tasks with visual results
- Built full-stack application with Next.js frontend and Flask backend, enabling downloadable trained models

Smart Traffic Management System | *YOLOv8, Python, OpenCV, Streamlit*

SIH 2025

- Collaborated in 6-person team to develop intelligent traffic management solution for real-time congestion control
- Trained YOLOv8 model for license plate detection and traffic density estimation from live camera feeds
- Built traffic simulation module to test and validate priority queue algorithms for reducing vehicle waiting times
- Integrated admin dashboard with live monitoring, police override functionality, and smart mobility features

AWS Image Analyzer | *Next.js, AWS S3, AWS Rekognition, Google Drive API, TypeScript*

- Built full-stack application integrating Google Drive, AWS Rekognition, and S3 for automated image analysis
- Implemented AI-powered face detection, object recognition, and content-based search using AWS Rekognition
- Optimized storage by compressing images from 40MB+ to 10MB with minimal quality loss using Sharp library
- Developed responsive UI with Next.js, React, and shadcn/ui for seamless cross-device experience
- Live: aws-rekog-image-analyzer.vercel.app

CampusFind — Lost and Found Platform | *Firebase, Google IDX, Next.js*

- Created full-stack lost-and-found web application for college students with Firebase backend integration
- Implemented Firebase Authentication for secure user management and Firestore for real-time database operations
- Utilized Firebase Genkit for intelligent image matching to help users find their lost items
- Deployed production-ready application using Firebase Hosting with scalable cloud infrastructure

WebUI Element Detection | *YOLOv8, PyTorch, Streamlit, OpenCV* 2nd Place - GITAM Shorefest Hackathon

- Trained YOLOv8m model to detect web UI components achieving 52% mAP50 on custom dataset
- Built interactive Streamlit application for real-time detection with visual bounding boxes and tabular outputs
- Collaborated in 2-person team to preprocess data, fine-tune model, and deploy user-friendly interface

Handwritten Character Generator | *GANs, EMNIST Dataset, TensorFlow, Python*

- Developed Generative Adversarial Network to generate realistic handwritten characters using EMNIST dataset
- Achieved 85% accuracy at 100 epochs, demonstrating effective GAN training for character synthesis
- Implemented data preprocessing pipeline and model architecture for high-quality character generation

SmolVLM Demo App | *Vision-Language Model, TypeScript, Next.js*

- Built demo application showcasing SmolVLM capabilities for real-time object detection and classification from video
- Enabled use cases like video gallery search, text detection, and clothing recognition across video frames
- Developed TypeScript-based frontend for seamless interaction with vision-language model API

LEADERSHIP & ACTIVITIES

Video Editor: GitHub Community, COGAAN Club, and Anime & Manga Club (2023 – Present)

Volunteer: Google DevFest Hyderabad 2025

Active Participant: Tech community meetups including MongoDB, GDG Hyderabad, and HYD DAO

Lead of Documentation: Directorate of Sports & NCC, GITAM (Aug 2024 – Oct 2024)

CERTIFICATIONS

Google Cloud Computing Foundations: Data, ML, and AI in Google Cloud | Building AI Agents with MongoDB | Prompt Design in Vertex AI | Develop GenAI Apps with Gemini and Streamlit | Build a Machine Learning Image Classifier with Python | 7 Days Machine Learning Bootcamp by GDSC and TFUG Hyderabad