

MUDIT GARG

udit.workplace@gmail.com | linkedin.com/in/gargmudit2708
orcid.org/0000-0003-4073-0019 | github.com/MuditxGarg | muditgarg.in

Professional Summary

M.S. Computer Science student at Columbia University focused on building production-grade AI and LLM systems. Shipped core banking software at Oracle and built a multi-agent compliance system on Azure at atQor. Published researcher with 6 publications, an IEEE Best Paper Award, and multiple hackathon wins.

Education

Columbia University Master of Science in Computer Science	New York, New York, USA Expected Dec 2027
Symbiosis Institute of Technology Bachelor of Technology (Computer Science Engineering) with Honors in Artificial Intelligence and Machine Learning, 3rd Rank in Department (Top 2%) , GPA: 9.10/10	Pune, Maharashtra, India Sep 2021 – Jun 2025
Symbiosis Institute of Business Management Diploma in Business Management, Batch Topper , GPA: 9.17/10	Pune, Maharashtra, India Mar 2022 – Jul 2023
Anandalaya School AISSCE (CBSE), Grade: 95.6% AISSE (CBSE), Grade: 96% , Merit Certificate in Mathematics	Anand, Gujarat, India 2020 – 2021 2018 – 2019

Experience

Associate Consultant, Oracle Financial Services Software Ltd – Pune, India	Jun 2025 – Jun 2026
<ul style="list-style-type: none">Built and customized 22 RESTful APIs, 9 screens, and 2 GEFU interfaces in Oracle FLEXCUBE Retail Banking (FCR) across CASA, Loans, and Deposits, using Java, PL/SQL, and Oracle JET (OJET).Owned the end-to-end delivery lifecycle: development and customization, functional validation, post-validation fixes and enhancements, UAT support, and UAT and Pre-Production release creation and deployment.Communicated directly with client stakeholders to resolve UAT conflicts and bugs; packaged and released UAT builds near-daily and Pre-Production builds 1–2 times weekly via Jenkins for 3+ months.	
Associate Data Scientist Intern, atQor – Ahmedabad, India	Jan 2025 – May 2025
<ul style="list-style-type: none">Built a task-specific multi-agent compliance validation framework (Semantic Kernel) with rule-based and LLM-driven agents for matching, name, and wage checks, cutting validation time from hours to minutes.Developed a PDF-to-JSON pipeline into Azure Cosmos DB with dynamic rule configurations and async FastAPI endpoints (Pydantic-structured outputs), delivering sub-2s latency and ~25% higher reliability.Deployed on Azure for UAT; ran end-to-end and regression testing and refined logic from client feedback.Prototyped 3 GenAI tools: ColPali + GPT-4o PDF Q&A, a real-time speech assistant, and a RAG legal copilot.	

Projects

Multimodal and Multilingual RAG-based Support Bot

Implemented a chatbot for Indian languages, handling text, audio, and image, evaluating 17 RAG pipelines with multilingual embeddings and Azure AI Search, grounded on 170+ technical docs. *Tech Stack: Python, FastAPI, Azure AI Services, Various LLM Models, ColPali, Streamlit*

EmoVibe: AI-driven Mental Health Dashboard

Designed a multimodal framework analyzing text, images, and emoticons to detect anxiety, anger, and depression with 90% accuracy. *Tech Stack: Python, TensorFlow, OpenCV, Matplotlib, Flask*

Malware Detection & Classification using ML

Engineered dual ML pipelines for PE malware and URL detection with feature selection and class balancing, achieving up to 99.4% and 97.9% accuracy. *Tech Stack: Python, Scikit-learn, TensorFlow, Keras*

Sight Beyond Sight – Accessible Web Platform

Created an AI-powered website accessibility platform with content summarization, image description, and voice interaction; top-voted at OpenAI Stack Hack (7,000+ participants). *Tech Stack: Python, Beautiful Soup, Redis, OpenAI API, Azure TTS, Google Vision API, HTML/CSS/JS*

CropPal – Crop Identification & Growth Detection

Optimized a computer vision system for crop and wheat growth stage detection using transfer-learned CNNs, achieving 95%+ accuracy for precision agriculture and crop insurance. *Tech Stack: Python, React, Flask, FastAI*

Publications

Optimizing Multimodal RAG Systems for Multilingual Product Support	2026
International Arab Journal of Information Technology (IAJIT), Vol. 23, No. 3. DOI: 10.34028/iajit/23/3/9.	
EmoVibe: A Social Media-Based Emotion Dashboard via AI-Driven Multimodal Framework for Psychological Well-Being	2025
International Journal of Artificial Intelligence (IJAI), Vol. 14, No. 6. DOI: 10.11591/ijai.v14.i6.pp4565-4578.	
Malware Detection and Classification Using Machine Learning Techniques: An Implementation Study	2025
International Journal of Computing and Digital Systems (IJCDs), Vol. 18. DOI: 10.12785/ijcds/1571152361.	
CyberCraft: Encryption and Decryption Tool for Images using AES, DES and Chaotic Logistic Map	2026
Journal of Discrete Mathematical Sciences and Cryptography, Vol. 29, Issue 2-B. DOI: 10.47974/JDMSC-2526.	
Face Recognition for Efficient Identification of Domain Experts at Professional Meetups	2023
IEEE ICACTA 2023, Mumbai, India, pp. 1–6. DOI: 10.1109/ICACTA58201.2023.10392956.	
Technology in Education to Bridge India and Bharat	2021
In book <i>Bharat @75: Multiple Dimensions to Empower India for Better Tomorrow</i> , ISBN: 978-93-91681-37-1.	

Achievements

- **GATE Qualified (2024 & 2025)** in 2 Subjects: Data Science & AI (DA) and Computer Science (CS).
- **Best Paper Award**, IEEE ICACTA 2023, AI Track – *Face Recognition for Efficient Identification of Domain Experts*.
- **Winner** – MCCIA Edu-Fest 2022 Inter-College Project Competition, Pune.
- **3rd Place** – IEEE IC Hack 2.0 2023, Healthcare Track, Manipal University Jaipur.
- **Winner** – _VOIS Innovation Marathon 2022 (IR 4.0 technologies for social good), Pune.
- **3rd Place** – Technovation Hackathon 2021, Sharda University – Smart Citizen & Governance Track (2,500+ participants).
- **Finalist**, Foundation for Advancement of Education and Research (FAER) Scholar Program 2023–24.
- **Finalist**, Bajaj HackRx 4.0 (2023) – Selected among the top 36 teams.
- **Finalist & Top-voted Project**, OpenAI Stack Hack (7,000+ participants) – *Sight Beyond Sight*.
- **Merit Scholar**, Symbiosis International University (2022–23, 2024–25, 2025–26).
- **Technology Writer**, contributed 10+ articles to the *Digit Magazine* web portal.

Leadership & Activities

Research Intern, Symbiosis Centre for Applied AI – Pune, India	Jul 2023 – Jul 2024
• Compared YOLOv5 and YOLOv7 for tomato leaf disease detection and classification for an agri-robot use case.	
Service Learning Project Lead, GramKalyan NGO & Varhad Capital Pvt Ltd	Jul 2023 – Oct 2023
• Led a team of 5 to build 2 websites for the NGO and its parent organization, improving their digital outreach.	
Student Member, Institutions' Innovation Council – SIT Pune	Jul 2023 – Jan 2025
Student Editor-In-Chief, Departmental Editorial Team – CSE, SIT Pune	Jun 2022 – Dec 2024
• Led content and design for 2 annual magazines and 5 newsletters, plus social media visuals for the department.	
Core Member, Entrepreneurship Promotion and Innovation Cell – SIT Pune	Oct 2021 – Jan 2025
• Organized 10+ entrepreneurship events and 2 Annual E-Summits as core coordinator and IIC representative.	

Technical Skills

- **Languages:** Python, Java, C++, SQL, PL/SQL, C
- **AI/ML & GenAI:** LLMs, RAG, Multi-Agent Systems, Agentic AI, Multimodal AI, Computer Vision, NLP
- **Frameworks & Libraries:** PyTorch, TensorFlow, Keras, Scikit-learn, OpenCV, FastAI, FastAPI, Flask, React
- **Platforms & Tools:** Microsoft Azure (OpenAI, AI Search, Cognitive, Speech), Google Cloud (Vision, Speech, Language APIs), Semantic Kernel, LangGraph, Copilot Studio, Git, Jenkins (CI/CD), JIRA, Streamlit
- **Databases:** MySQL, PostgreSQL, Azure Cosmos DB, Redis, ChromaDB, FAISS, Oracle Database