

AMOGH A SETTY

Bengaluru, India · Email · LinkedIn · Website · Google Scholar · Certifications

EDUCATION

M S Ramaiah Institute of Technology

B.E in Electronics and Communication Engineering *GPA: 8.83*

Minor Degree in Computer Science

Bangalore, India

2025

STANDARDISED TEST SCORES

GRE : 323 (Q-165, V-158)

TOEFL : 117

GATE DA 2026 : AIR 4886 / 69,242

RESEARCH PUBLICATIONS

D² Design: Dual-Conditioned Diffusion AI for Accelerated Product Form Generation

Computer-Aided Design (Elsevier), 2026 [DOI]

Git for Sketches: An Intelligent Tracking System for Capturing Design Evolution

Computers and Industry (submitted) [arXiv]

Robust Multimodal DeepFake Detection Using Transfer Learning and Feature Engineering

16th Intl. Conference on Computing, Communication and Networking Technologies (ICCCNT), accepted

Creating an Atomic User Model for Personality-Aware LLM Interaction

ACL ARR 2026 (May Cycle)

SKILLS

Languages	Python, MATLAB, C, C++
ML & Frameworks	PyTorch, TensorFlow, Scikit-Learn, Keras
Computer Vision	OpenCV, PIL, scikit-image
Generative AI & LLMs	Transformers, Diffusers, LangChain, NeMo Guardrails
Data & Development	Numpy, Pandas, Git, FastAPI
Relevant Coursework	Image & Video Processing, Data Structures using C++, Advanced Computational Algorithms, DSP, Engineering Mathematics

WORK EXPERIENCE

Indian Institute of Science (IISc)

Research Intern

Bangalore, India

Dec 2024 – May 2026

- **D² Design** — Developed AI-assisted product design systems through **FormForge Tex** and **FormForge Img**. Constructed a large-scale product-form **dataset** via LLM-guided attribute discovery, embedding clustering, and automated web scraping.
- **GitAI** — Developed **DIMES**, a Git-inspired sketch version control system with AI-assisted design evolution, and **AEGIS**, a real-time sketch understanding framework using ML and deep learning for stroke classification.
- **PAWNI** — Designed EEG-based HCI experiments (32-channel EMOTIV) evaluating AI-assisted prompt refinement and cognitive workload across LLM-assisted tasks.
- **Atomic User Models (AUM)** — Contributed to a layered AI framework integrating psychometric assessment, cognitive profiling and LLM-based personalized response generation.

DNV

Intern

Bangalore

Aug 2024 – Oct 2024

- Built an open-source alternative to licensed renewable-energy monitoring software (Python, Tkinter, PyQt5) for interactive visualization and asset management.
- Processed large-scale energy datasets with Pandas for real-time monitoring and performance analysis.

Li2 Technologies Pvt. Ltd.

Intern

Bangalore

Sep 2023 – Oct 2023

- Developed an LLM-powered learning platform for personalised education in underprivileged classrooms using Python, LangChain and NVIDIA NeMo Guardrails.

PROJECTS

DeepFake Detection in Images

Best Project Award

Developed a deepfake detection pipeline using frequency-domain transformations and fine-tuned a ResNet-50 model on transformed facial representations for the DFWildCup 2025 competition, achieving 89.47% accuracy on the benchmark dataset.

Dark Patterns Detector for E-Commerce Websites

Developed a Chrome extension to detect deceptive interface patterns including False Urgency, Subscription Traps and Basket Sneaking using the IDEFICS-9B vision-language model, with contextual explanations rendered directly in-browser.

Tvacha – The Skin Health App

Built a CNN-based skin lesion classifier with a dermatologist, integrating domain-specific clinical features for multi-class prediction (94% accuracy on curated datasets).