KOMAL MATHUR.

(+91) 8527845810 \$\phi\$ komlixmathur@gmail.com LinkedIn GitHub Google Scholar Website

EDUCATION

Bachelor of Computer Science, Manipal Institute of Technology

2022 - 2026

CGPA: 9.95/10

Rank: 1/2684 1st in CSE Department

EXPERIENCE

Generative AI Intern

May 2024

Info Edge, Naukri.com

Greater Noida, UP

- Building a robust MCQ Question Generation pipeline using gpt-4o, ensuring complete automation through integration with MySQL and
- Reduced token usage and optimized prompts, ensuring cost-effectiveness and scalability.

Samsung PRISM Intern

April 2024

Samsung R&D Institute India

Mangalore, Karnataka

- Pioneering Effective LLM Tokenization for Smart Home Events
- Focused on techniques for integrating RAG to reduce the need for frequent LLM fine-tuning, enabling real-time processing of smart home events.

AI Research Intern

Department of ICT

September 2023

MIT Manipal

- Working on Multimodal Deception detection under Dr. Nisha Shetty
- Proposed a novel architecture using the feature embeddings from multiple modalities and combining using latent space.

SKILLS

Programming Languages

C++, C, Java, Python

Technologies

MySQL, NLP, Generative AI, HuggingFace

Relevant Coursework

Data Structures, Object Oriented Programming, Database Systems, Probability,

Algorithms, Computer Architecture, Linear Algebra, Automata Theory

PUBLICATIONS

EMNLP 2023 Bangla Sentiment Analysis using Weighted and Majority Voted Fine-Tuned Transformers. Seth, P., Goel, R., **Mathur, K.**, Vemulapalli, S. (2023) ACL Anthology

PROJECTS

Hey Taxii App - Developed a ride-share web application using MySQL, SQL Alchemy, Python and HTML, equipped with the Google Maps API GitHub

Student Performance Indicator - Developed an AI driven performance predictor using Modular Programming in python complete with deployment using Microsoft Azure Services (MLOps) and Github Actions GitHub

AWARDS & ACHIEVEMENTS

- Ranked among **Top 50** applicants to the 5th Cohort of Women in Engineering supported by **Google**, and offered **100%** scholarship and a reward of **Rs. 100,000**
- Awarded the Director's **Diamond Jubilee Award** for being ranked 1/2684 students in the first year.
- Received Achiever's Scholarship worth Rs.1,01,800 for academic excellence in the first year