Contact

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www.linkedin.com/in/
mohitkumar111 (LinkedIn)

Top Skills

CycleGAN

Agriculture

Multi-agent Systems

Languages

Bengali (Native or Bilingual)

English (Full Professional)

Hindi (Native or Bilingual)

French (Elementary)

Certifications

Microsoft Certified: Azure Data
Scientist Associate

Data Structures and Algorithms -
Self Paced

Participation in ATL Tinkerpreneur

Figma Essential Training: The
Basics

Microsoft Certified: Azure AI
Engineer Associate

Honors-Awards

Mathematics Olympiad

English Olympiad

Social Science Olympiad

State-level Science Innovators'
Exhibition

Adobe Creativity Challenge

Mohit Kumar

ECM'26 @ VIT Chennai | Ex-Research Intern @ Shantou University,
CHAIR VIT, Annam.AI, Samsung PRISM, CCPS VIT, IIT Hyderabad
Bengaluru, Karnataka, India

Summary

I'm Mohit, a B.Tech student in Electronics & Computer Engineering
at VIT Chennai, with hands-on experience in building AI systems that
solve real-world problems. I've worked on multi-agent architectures
(like Nexus, an AI-powered research automation platform), RAG
pipelines, multilingual chatbots, and domain-specific fine-tuning for
models in healthcare, agriculture, and more.

My journey spans:
• Research on transformer & GCN models for Human Activity
Recognition
• Building multilingual, RAG-based voice chatbots for file-based
queries (IIT Hyderabad)
• AI-powered document understanding & audio classification
(Samsung PRISM)
• Full-stack AI solutions integrating LLMs, LangChain, HuggingFace,
and FastAPI

I'm passionate about leveraging LLMs, conversational AI, and
knowledge retrieval to build intelligent systems that are practical,
scalable, and ethical. I enjoy operating in startup ecosystems where
learning is fast, ownership is high, and innovation is constant.

Looking for internships & research opportunities in ML/NLP/AI
Let's connect if you're working on something cool or want to
collaborate!

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Experience

Shantou University
Research Intern
April 2025 - September 2025 (6 months)
Shantou, Guangdong, China

• Designed a novel Gated Multi-Domain CUT model to perform efficient X-ray normalization across multiple intensity levels using a single, unified generator.
• Implemented an attention-based architecture and a hybrid contrastive loss to ensure high anatomical fidelity while precisely modulating image style.
• Outperformed established baselines (CycleGAN, StarGAN, CUT), achieving a Structural Similarity (SSIM) of 0.9858.

ANNAM.AI
Project Intern
May 2025 - July 2025 (3 months)
IIT Ropar, Punjab

• Worked under Dr. Soma Dhavala to develop Sanchalak, a multilingual voice assistant helping farmers access 50+ government schemes via regional audio input.
• Formulated a FastAPI backend with Prolog-based rule engine, and an end-to-end pipeline using Whisper, Azure Translator/TTS, and LLMs (Gemma) for personalized voice interactions.
• Deployed modular microservices on MCP servers with Streamlit UI and automated scheme data ingestion, achieving <5s latency per query.

Samsung R&D Institute India
Prism Intern
July 2024 - April 2025 (10 months)
Chennai, Tamil Nadu, India

• Fine-tuned CLAP and CLIP on 20k+ medical audio samples (heart, respiratory, bowel sounds) curated from PhysioNet, BHIC, AudioSet, VGG-Sound, and the Heart Sound Challenge dataset.
• Built a full annotation + preprocessing pipeline, and derived t-SNE plots to visualize CLIP/CLAP embeddings, enabling zero-shot analysis across 10+ body sound classes.

Center for Cyber Physical Systems
Research Intern
June 2024 - August 2024 (3 months)
VIT Chennai

• Conducted research on Human Activity Recognition under Dr. Balasundaram A, developing a HAR-GCNN model that attained 99.99% accuracy on the PAMAP2 sensor dataset.

• Designed a graph-based spatiotemporal architecture robust to 66% missing labels, outperforming CNN (99.75%) and LSTM (98.10%) across 3–25 activity classes.
• Authored a research paper detailing model design, implementation, and benchmarking on structured time-series sensor data.

Data Science Club VIT Chennai
Research Team Member
May 2023 - June 2024 (1 year 2 months)
Chennai, Tamil Nadu, India

Education

Vellore Institute of Technology
Bachelor of Technology - BTech, Electronics and computer engineering
 · (August 2022)

Radiant International School - India
Higher Secondary Degree · (April 2019 - May 2021)

Delhi Public School, Newtown
 · (April 2014 - March 2016)