

SAI DILEEP KUMAR MUKKAMALA

[GitHub](#) | [LinkedIn](#) | [Gmail](#)

EDUCATION

University of Michigan, Dearborn, MI
Master's in Data Science
IIIT, Kalyani, Kolkata
Bachelor's in Computer Science Engineering

Expected: Jan 2026
GPA: 3.5/4.0
June 2023
GPA: 3.5/4.0

ACADEMIC PROJECTS

Paper Pulse AI: Research Paper to Podcast Converter

Oct 2024 – Dec 2024

- Designed and implemented an AI platform converting over 50 research papers into podcast formats, increasing accessibility for academic material by 40%.
- Achieved a 20% reduction in text-to-speech latency through optimization of GPT-4o-mini and custom Text-to-Speech APIs.

Novel Garage: Dream-to-Novel Converter

Dec 2023 – March 2024

- Built a unique AI tool that structured 100+ dream descriptions into novel formats, utilizing Stable Diffusion SDXL for story generation.
- Enhanced user engagement by 30% through immersive storytelling that reflects users' dream experiences.

Pawsible Care AI: Virtual Veterinary Doctor

May 2023 -August 2023

- Developed and deployed an NLP-based veterinary platform, enabling real-time consultations with over 85% accuracy on pet symptom analysis.
- Streamlined the pet care experience by reducing average consultation time by 50% with Llama2 and Streamlit.

Emotion-Based Music Player System

Dec 2022 - Jan 2023

- Engineered an emotion-driven music platform that uses OpenCV and emotion recognition APIs, successfully analyzing 1,000+ user emotional states.
- Curated playlists increased user satisfaction scores by 25% with personalized music recommendations.

EXPERIENCE

ML Intern, Atticus AI

May 2023 – Nov 2023

- Developed large language models (LLMs) for legal analysis, improving document processing efficiency by 30% for law firms.
- Optimized data workflows, leveraging Langchain and Vector DB, resulting in a 20% boost in model response times.

AI/ML Intern, SoctAI

Mar 2022 – Jul 2022

- Designed computer vision algorithms for autonomous vehicles, enhancing navigation accuracy by 15% through improved image processing.
- Increased vehicle response reliability by 25% using Python and OpenCV.

ML Research Intern, IIIT Delhi

May 2022 – Jul 2022

- Led a project with Facebook, analyzing user mobility data and developing a real-time dashboard that processed 10,000+ data points daily.
- Improved data visualization accuracy by 30% through optimized ELK stack tools.

PUBLICATION

Generation of Next Heatmap of India using CLSTM Architecture

(In Progress)

- Conducting advanced research on predictive heatmaps using CLSTM architecture to support urban planning, targeting a 50% increase in forecast accuracy for climate-related insights.

SKILLS:

- Generative AI: Langchain, LLMs, Vector DB
- Machine Learning & Data Science: Python, TensorFlow, ELK, OpenCV
- Specialized Tools: Prompt Engineering, Statistics & Probabilit