

# KUSHAL

[Linkedin.com](#) | [kushalmandala29@gmail.com](mailto:kushalmandala29@gmail.com) | [Github.com](#) | 9391655898

## PROFFESIONAL SUMMARY

Final year student in Artificial Intelligence & Data Science, specializing in Cloud and Edge Computing. Skilled in Python, Django, and RESTful API development, with strong foundations in machine learning, and LLM integration. Google Cloud Certified with practical experience in deploying scalable, cloud-native AI solutions. Eager to contribute to innovative, real-world applications of AI and backend development.

## EDUCATION

June 2022 - Present

### Bachelor of Technology | KL University

- Major in Artificial Intelligence and Data Science, Specilization in Cloud and Edge computing

## SKILLS

- PROGRAMMING LANGUAGES:** PYTHON
- WEB FRAMEWORKS:** DJANGO
- API DEVELOPMENT:** RESTFUL APIS, POSTMAN, FASTAPI
- LLM & AI INTEGRATION:** OPENAI API, HUGGING FACE TRANSFORMERS, LANGCHAIN, RAG
- DATABASES:** POSTGRESQL, MYSQL, SQLITE
- VERSION CONTROL & DEVOPS:** GIT, GITHUB, CI/CD PIPELINES (GITHUB ACTIONS, JENKINS, ETC.)
- CLOUD PLATFORMS:** AWS, GCP

## WORK EXPERIENCE

### Term Paper – KLGLUG + BalaSwecha(SwechaAP)

Feb 2025 - April 2025

- Led the design and implementation of a web-based 3D simulation that teaches projectile motion under varying planetary gravities using Three.js, Cannon.js, and TensorFlow.js. Developed the gesture interaction system using MediaPipe Hands, enabling intuitive controls such as throwing, catching, rotation, and zoom through webcam
- Engineered the real-time physics logic to simulate motion based on angle, gravity, and force, creating an interactive and educational solar system experience aimed at improving student engagement with physics concepts.

### AWS AI ML Virtual Internship || AICTE x Edunet x AWS

Jan 2024 - Mar 2024

- Implemented and configured various AWS cloud offerings, gaining hands-on experience with cloud infrastructure and AI/ML services.
- Explored AWS machine learning tools to build, deploy, and optimize models in a cloud environment.

## PROJECTS

### Student Assistant chat system

- Led a 4-person team in designing and implementing the LLM structure for a RAG system using Langchain, enhancing student access to real-time, academic information on colleges, courses, and programs, achieving 87% answer accuracy.
- Integrated Llama 3.1 model (via Ollama), ChromaDB for vector storage, and dynamic web scraping from CollegeDunia, optimizing the system for Smart India Hackathon 2024 selection process.

### AI-Powered Email Automation System

- Built an AI-driven email generation system leveraging LangChain and a fine-tuned LLaMA model, with **95% accuracy** based on tone and intent..
- Designed and deployed a fully automated DevOps pipeline with CI/CD processes using GitHub Actions, integrating Docker containerization, AWS ECR for deployment, and Terraform-based Infrastructure as Code for scalable cloud management.

## CERTIFICATIONS

[Google Associate Cloud Engineer](#) ,  
[Hacker Rank certified SQL Intermediate](#)

[Oracle Generative AI CertifiedProfessional](#)  
[IBM-Python](#)