

**Event name** : Building Next-Gen AI Agents

**Date of Event** : 12<sup>th</sup> August-14<sup>th</sup> August,2025

**Venue** : Alpha-Delta Seminar Hall

**Number of participants** : 66

**Targeted Audience** : VII Semester, Dept of AI&DS.

**Objective** : To equip students with hands-on skills in AI, Cloud, Automation and Cybersecurity by applying advanced frameworks to build intelligent tools for real-world impact.





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**DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE**

Department of **Artificial Intelligence and Data Science** organized a workshop on **“Building Next-Gen AI Agents”** focusing on hands-on development of intelligent tool from chatbot creation and summarization to autonomous agent design and secure cloud workflow aimed at building practical, industry-ready tech skills.

### **Workshop Objective:**

#### **Day 1 Focus:**

- Hands-on experience with LangChain - Building Q&A chatbots by integrating Cohere and OpenAI API keys
- Text summarization development - Demonstrating how Large Language Models can efficiently process and condense information
- Workflow automation training - Exploring n8n to streamline tasks and improve efficiency
- Cloud infrastructure fundamentals - Learning Google Cloud Platform (GCP) concepts
- Cybersecurity awareness - Introduction to key practices and tools like "Have I Been Pwned"

#### **Day 2 Focus:**

- Advanced AI pipeline development - Exploration of Retrieval-Augmented Generation (RAG)
- Orchestrated workflow creation - Combining RAG and n8n with cutting-edge tools like OpenRouter, Pinecone, and GCP
- Autonomous AI agent design - Building agents capable of sending emails without human intervention
- Career guidance - Structured roadmaps covering Cybersecurity, AI, and DevOps with tech conference insights



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#### Day 3 Focus:

- Creative AI applications - Developing a restaurant name generator using LangChain and Cohere API
- Advanced framework mastery - Introduction to MCP (Model Context Protocol), PhiData, and CrewAI
- Custom AI agent deployment - Building specialized models using Clarifai
- Critical thinking development - Comprehensive cybersecurity quiz and debate sessions
- Professional development - Career guidance on AI conferences, learning resources, and continuous growth

Recognition for participants motivates them to strive for excellence, while the overall event fosters a culture of innovation and continuous learning.

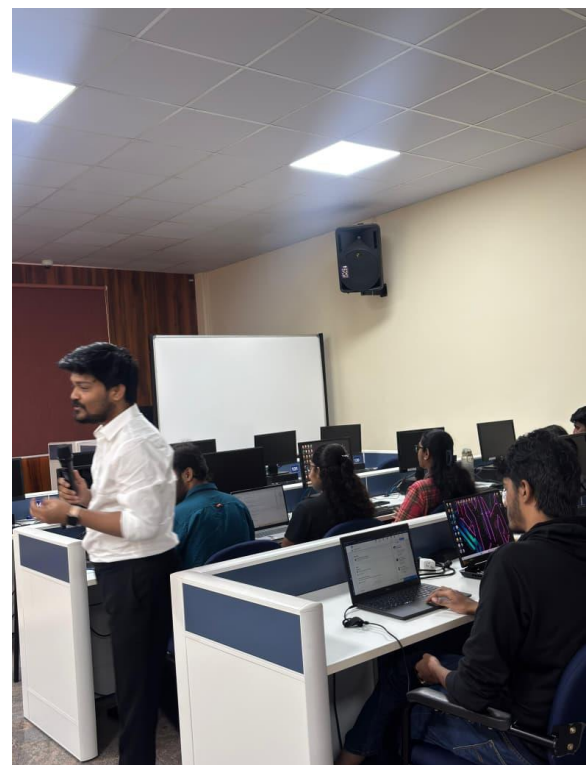
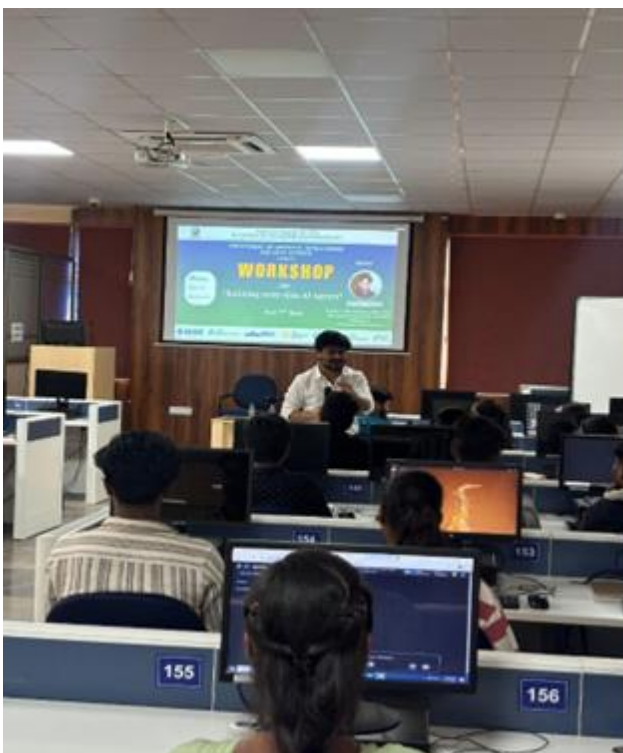
#### **Resource Person:**

Ajinkya Lohakare, Founder & CTO of Ditto Security, is a renowned cybersecurity expert with over 15 years of global experience. A TEDx speaker and thought leader, he has conducted 500+ workshops and collaborated with Fortune 500 companies and law enforcement agencies. His expertise spans ethical hacking, digital forensics, generative AI, and quantum computing. He actively contributes to tech summits, academic institutions, and podcasts on cybersecurity and emerging technologies.

#### **Feedback:**

The three-day AI workshop was a transformative experience that blended theory with hands-on learning, deepening the students' understanding of cutting-edge technologies. It boosted their confidence to pursue AI, Cybersecurity, and DevOps in real-world applications and future career paths.

### Glimpses of Workshop:







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**TECHNICAL COORDINATORS**

  
**HOD**  
HOD

  
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