

One Week Faculty Development Program

On

“AI TOOLS and CYBER SECURITY APPLICATIONS”

On

25-05-2026 to 29-05-2026

Organized By

Department of Computer Science and Engineering

NARSIMHA REDDY ENGINEERING COLLEGE

(Autonomous)

HYDERABAD-500100

Title of The Event	“AI TOOLS and CYBER SECURITY APPLICATIONS”
Resource Person	Sai Satish Damaraju Founder and CEO Indian Servers
Event Convenor Details	Dr. N. Rajasekhar DEAN- EXTERNAL AFFAIRS, NRCM
Program Type*	FDP
Start Date : End Date : Duration of the activity :	9.30 AM to 04.00 PM
Mode of Session	Offline
Number of Faculty Participants *	100
Objectives of the FDP	<ul style="list-style-type: none"> • To provide comprehensive knowledge of Artificial Intelligence, Machine Learning, and Deep Learning concepts. • To introduce participants to Generative AI and Prompt Engineering techniques. • To demonstrate the use of modern AI tools such as ChatGPT, Gemini, Groq, and OpenAI APIs. • To familiarize faculty members with Natural Language Processing (NLP) and Large Language Models. • To provide practical exposure to Retrieval-Augmented Generation (RAG) and AI chatbot development. • To train participants in Computer Vision applications using OpenCV and YOLO. • To introduce AI Agents, multi-agent systems, and AI automation workflows. • To enhance awareness of Cyber Security fundamentals and AI-driven security applications. • To encourage innovative project development and AI-based research activities
Outcomes of FDP/ Benefit in terms of learning/Skill/Knowledge obtained	<p>Outcomes of the FDP on “AI TOOLS and CYBER SECURITY APPLICATIONS”</p> <p>At the end of the Faculty Development Program, the participants were able to:</p>

	<ul style="list-style-type: none"> ➤ Understand the fundamental concepts of Artificial Intelligence (AI), Machine Learning (ML), and Deep Learning (DL) and their real-world applications. ➤ Apply Generative AI techniques and design effective prompts using Prompt Engineering methodologies. ➤ Utilize advanced AI tools such as ChatGPT, Gemini, Groq, and OpenAI APIs for academic, research, and industrial applications. ➤ Gain knowledge of Natural Language Processing (NLP) concepts and Large Language Models (LLMs) for intelligent text processing and automation. ➤ Develop AI-powered solutions using Retrieval-Augmented Generation (RAG) frameworks and chatbot technologies. ➤ Implement Computer Vision applications using OpenCV and YOLO for image and object detection tasks. ➤ Understand the architecture and applications of AI Agents, Multi-Agent Systems, and AI-driven automation workflows. ➤ Acquire awareness of Cyber Security principles, cyber threats, vulnerabilities, and AI-enabled security solutions. ➤ Integrate AI technologies into teaching-learning processes, research activities, and project development.
<p>Brief Report:</p>	<p>A One-week FDP on “AI TOOLS and CYBER SECURITY APPLICATIONS” was successfully conducted at NARSIMHA REDDY ENGINEERING COLLEGE (Autonomous), Hyderabad on 25th to 29th May 2026. The workshop was organized by the CSE department under the guidance of Dr. N. Rajasekhar.</p> <p>The FDP was led by Sai Satish Damaraju Founder and CEO Indian Servers.</p> <p>The FDP comprised interactive theory sessions, live demonstrations, and hands-on training focused on ‘AI Tools and Cyber security Applications’.</p> <p>FDP Highlights:</p> <ul style="list-style-type: none"> ➤ Comprehensive coverage of AI, ML, Deep Learning, Generative AI, and Cyber Security concepts. ➤ Expert sessions by distinguished academicians and industry professionals. ➤ Hands-on training on ChatGPT, Gemini, Groq, OpenAI APIs, and Prompt Engineering. ➤ Practical demonstrations on NLP, Large Language Models (LLMs), and AI-powered applications. ➤ Exposure to Retrieval-Augmented Generation (RAG) and AI Chatbot Development.

- Interactive sessions on Computer Vision using OpenCV and YOLO.
- Demonstration of AI Agents, Multi-Agent Systems, and workflow automation tools.
- Cyber Security awareness sessions covering modern threats, vulnerabilities, and defense mechanisms.
- Discussion on AI applications in teaching, research, innovation, and industry.
- Opportunities for collaborative research, project development, and publication in emerging technologies.
- Active participation of faculty members through discussions, hands-on exercises, and knowledge-sharing activities.
- Enhancement of faculty readiness to integrate AI and Cyber Security technologies into academic curricula and student projects.

The Faculty Development Program (FDP) on “AI Tools and Cyber Security Applications” was organized with the objective of enhancing the knowledge and practical skills of faculty members in emerging technologies related to Artificial Intelligence and Cyber Security. The program provided a comprehensive understanding of AI fundamentals, Machine Learning, Deep Learning, Generative AI, Prompt Engineering, Natural Language Processing, Large Language Models, Computer Vision, AI Agents, and Cyber Security applications.

Expert resource persons from academia and industry delivered insightful sessions covering both theoretical concepts and practical demonstrations. Participants were introduced to advanced AI tools such as ChatGPT, Gemini, Groq, OpenAI APIs, and modern frameworks used in AI development. Hands-on sessions enabled participants to gain practical exposure to Retrieval-Augmented Generation (RAG), AI Chatbot Development, OpenCV, YOLO-based object detection, and AI automation workflows.

The Cyber Security sessions focused on current cyber threats, security challenges, ethical hacking concepts, and the role of Artificial Intelligence in strengthening cyber defence mechanisms. The FDP encouraged participants to explore innovative applications of AI in education, research, and industry.

The program successfully enhanced the technical competencies of faculty members and motivated them to adopt AI-driven teaching methodologies, undertake interdisciplinary research, and guide students in developing innovative projects aligned with Industry 5.0 requirements.

FDP Outcomes:

After successful completion of the Faculty Development Program (FDP), the participants will be able to:

- Effectively use AI tools such as ChatGPT, Gemini, Groq, and OpenAI APIs for teaching, research, and content development.
- Understand and implement Natural Language Processing (NLP) and Large Language Model (LLM) applications.
- Develop AI-powered chatbots and Retrieval-Augmented Generation (RAG) based solutions.
- Design and implement Computer Vision applications using OpenCV and YOLO frameworks.
- Utilize AI Agents and automation workflows to improve productivity and decision-making processes.
- Identify cyber threats, vulnerabilities, and security risks in digital environments.
- Apply AI-driven approaches for enhancing Cyber Security monitoring, detection, and response.
- Integrate emerging AI technologies into curriculum delivery, research activities, and student project guidance.
- Develop innovative AI and Cyber Security-based projects addressing real-world challenges.
- Enhance interdisciplinary research capabilities and foster continuous learning in emerging technologies.

Poster/ Brochure of the Event

A FIVE-DAY FDP ON AI TOOLS AND CYBER SECURITY APPLICATIONS



SRI. D. SAI SATHISH GARU
CEO, INDIAN SERVERS



25th - 29th
May 2026



09:00 AM
to 04:00 PM



IT PARK

Coordinator
Dr. N. Rajasekhar
Dean-External Affairs



Location:
Maisammaguda (V), Kompally - 500100, Hyderabad.



Website
www.nrcmec.org/

Event Photograph 1&2



Event Photograph 3&4



*****~End of the Report~*****