

# Generative AI (GenAI) Workshop

By Techgyan Technologies

Artificial Intelligence (AI) has transformed the digital landscape, unlocking new possibilities in automation, content generation, and interactive applications. One of the most groundbreaking advancements in AI is Generative AI (GenAI), which has given rise to Large Language Models (LLMs) capable of producing human-like text, generating images, and enhancing numerous fields such as marketing, education, and customer service. This **Generative AI Workshop** is designed to introduce participants to the core principles of GenAI, provide hands-on experience with cutting-edge tools, and empower them to build AI-powered applications.

**Duration:** 1 Day (7 hours of learning and hackathon)

## Session 1: Introduction to Generative AI (1 Hour)

- Overview
  - What is Generative AI and LLMs?
  - Applications in content creation, chatbots, and marketing.
- Activity
  - Explore Generative AI tools like ChatGPT and DALL-E.

## Session 2: Practical Introduction to Hugging Face (1 Hour)

- Interactive Lecture
  - Overview of Hugging Face tools and pre-trained models.
- Hands-On Activity
  - Solve problems like sentiment analysis or text summarization using Hugging Face.

## Session 3: Building AI Applications (1 Hour)

- Activity
- Build a chatbot using Hugging Face or similar platforms.
- Compare local vs. cloud-based LLM solutions.

## Session 4: Advanced Concepts with LangFlow (1 Hour)

- Topics
  - Introduction to Retrieval-Augmented Generation (RAG).
  - Explore use cases with LangFlow.
- Discussion
  - Address ethical considerations like bias and transparency in AI.

## **Session 5: Hackathon Day 2 (1 Hour)**

- Team Project
  - Create projects leveraging Generative AI concepts.
    - Examples: AI-powered chatbots or personalized marketing AI.

## **Session 6: Summary & Feedback (1 Hour)**

- Recap of Key Learnings
  - Review concepts and activities from both days.
- Team Presentations
  - Teams present their projects and discuss challenges.
- Feedback
  - Collect feedback to refine future workshops.

## **Workshop Outcomes**

- Foundational understanding of AI, ML, and GenAI.
- Hands-on experience with tools like Teachable Machine and Hugging Face.
- Ability to build and fine-tune AI models.
- Awareness of ethical considerations in AI applications.

## **Post-Workshop Opportunities**

- What Participants Can Create
  - Image classification models.
  - Chatbots and personalized AI tools.
  - Custom AI applications using ML and GenAI concepts.
- What They Can Do After the Workshop
  - Explore advanced AI/ML courses and certifications.
  - Apply learned concepts to solve domain-specific problems.
  - Build a portfolio showcasing AI projects to enhance career opportunities.