

Gen AI Fundamentals III - Advanced

Description

This course is designed to deepen the knowledge of attendees with the more Advanced concepts in Gen AI. This course Builds further onto the Fundamentals II Course, to provide an advanced dive into Generative Models, industry applications, and hands-on learning.

Outline

Session 1: Advanced Topics and Applications with Generative Models - Conditional Generative Models

Session 2: Advanced Topics and Applications with Generative Models - Reinforcement Learning for Generative Tasks

Session 3: Advanced Topics and Applications with Generative Models – Ethical and Societal Implications

Session 4: Advanced Topics and Applications with Generative Models – Advanced Applications and Future Directions

Prerequisite

GenAI Fundamentals II

Objectives

Using appropriate data, introduce delegates to:

- Deeper Dive into Generative Models
- Working with and implementing Autoregressive Models
- Working with and implementing Variational Autoencoders (VAEs)
- Working with and implementing Generative Adversarial Networks

Outcome

Delegates will leave the sessions with a deep understanding of Advanced applications of and considerations of Generative Models

Program

Session 1:

Advanced Topics and Applications with Generative Models - Conditional Generative Models

- I. Overview of conditional generative models
- II. Implementing conditional GANs and VAEs
- III. Applications in image-to-image translation, text-to-image generation, etc.

Session 2:

Advanced Topics and Applications with Generative Models - Reinforcement Learning for Generative Tasks

- I. Introduction to reinforcement learning
- II. Applying reinforcement learning to generative tasks
- III. Training models for sequential decision-making in generative tasks

Session 3:

Advanced Topics and Applications with Generative Models – Ethical and Societal Implications

- I. Ethical considerations in generative AI
- II. Societal impacts of generative AI technologies
- III. Responsible AI development practices

Session 4:

Advanced Topics and Applications with Generative Models – Advanced Applications and Future Directions

- I. Cutting-edge research in generative AI
- II. Advanced applications such as video generation, 3D object generation, etc.
- III. Future directions and trends in generative AI research