Gen AI for AI Engineers

Duration – 24 Hours

Program Description

This program equips developers with the foundational and advanced concepts of Generative AI, enabling them to build, fine-tune, and deploy AI-driven applications effectively. Participants will explore generative models, transformers, Variational Autoencoders (VAEs), and Generative Adversarial Networks (GANs).

The course delves into essential topics like retrieval-augmented generation (RAG), prompt engineering, ethical considerations, and explainable AI techniques. Additionally, it covers practical applications such as fraud detection, domain-specific fine-tuning, and addressing deployment challenges, monitoring, and maintenance of AI systems.

Learning Outcomes

- Learn the fundamentals and working principles of generative AI models.
- Gain insights into transformer-based architectures and their role in modern AI.
- Understand the mechanisms behind VAEs and GANs for data generation.
- Design effective prompts to optimize AI-generated outputs.
- Understand how RAG enhances generative AI capabilities.
- Utilize generative models to detect and prevent fraudulent activities.
- Adapt pre-trained models to specialized domains for improved accuracy.
- Recognize and mitigate bias, fairness, and responsibility issues in AI.
- Learn best practices for deploying generative AI models at scale.
- Implement robust monitoring and maintenance strategies for AI applications.
- Enhance model transparency and interpretability for better trust and accountability

Course Topics

- Introduction to Generative Models
- Introduction to Transformers
- Variational Autoencoders (VAEs)
- Introduction to Generative Adversarial Networks (GANs)
- Introduction to Prompt Engineering
- What is RAG (Retrieval Augmented Generation)
- Fraud Detection Using Generative Models.
- Fine Tune existing LLMs on Domain documents
- Ethical Considerations
- Deployment Challenges
- Monitoring and Maintenance
- Explainable AI techniques.

Modules can be customized to suit client's specific needs and duration accordingly