Gen AI Framework and Tools

Duration - 3 Days / 24 Hours

Program Description

This program provides a comprehensive understanding of the frameworks, tools, and best practices in Generative AI. Participants will gain hands-on experience in fine- tuning AI models, working with vector embeddings, and integrating Large Language Models (LLMs) into applications. The course covers critical aspects such as prompt engineering, modular validation, and software engineering principles tailored for GenAI development. Additionally, it explores LangChain for building AI-powered applications, differentiates LLMs, and addresses risks and limitations related to accuracy, ensuring responsible and effective AI implementations.

Learning Goals

- Learn techniques for fine-tuning LLMs to improve task-specific performance.
- Identify and mitigate risks associated with AI-generated outputs.
- Implement vector embeddings for AI applications, improving search and contextual understanding.
- Select and apply appropriate models for various Generative AI use cases.
- Build AI-powered applications using LangChain for enhanced interactivity and automation.
- Compare and contrast different LLM architectures to choose the right one for specific tasks.
- Design and implement modular validation techniques to ensure AI reliability.
- Develop effective prompt strategies to maximize AI model outputs.
- Create and deploy applications that integrate Generative AI capabilities.
- Utilize best practices in software development to build scalable and maintainable AI solutions.

Course Topics

- Fine tune models
- Address Risks/limitations for accuracy
- Vector embeddings for apps
- Model use
- LangChain
- Differentiating LLMs
- Modular Validation
- Prompt Eng.
- Build apps that leverage GenAI
- Software Eng principles for GenAI