Power of Generative AI

Duration: 8 Hours (1 Day)

Overview

The Power of Generative AI certification likely refers to a form of recognition for individuals who demonstrate proficiency in understanding and leveraging generative artificial intelligence. Generative AI encompasses technologies capable of creating content, such as text, images, and code, through Machine learning models. It is used by industries for various purposes including design, automation of Content creation, personalized customer experiences, and Data augmentation. Through its ability to generate novel data and insights, generative AI drives innovation, enhances productivity, and leads to the development of new business models across sectors such as technology, media, healthcare, and finance.

Audience Profile

Data scientists and machine learning engineers - AI product managers and entrepreneurs

Technology enthusiasts and early adopters

Business professionals interested in AI innovation

Academics and researchers in computer science

Course Syllabus

Chapter 01: Introduction to Generative AI and its Industry

- Applications
- What is Generative AI?
- Significance of Generative AI & The Role of Leadership in in Today's World
- Introduction to Highly Used Top 10 AI tools, example (Generative AI for Image, Excel,
- PPT, Code, Design)
- Generative Models and Application of Generative Models
- Practical Applications & Understanding the Capabilities of AI - With Management
- Perspective
- Practical Applications & Understanding the Capabilities for software development
- teams using AI tools

Chapter 02: Use Cases for Management

- Excel Data Representation with Generative AI
- Generating Reports and Dashboards
- Enhancing Data Visualization with AI
- Using Generative AI to Create Presentation Slides
- Designing Effective Presentation Outlines

Chapter 03: Use Cases for End Users

- Usecase 1: Excel data analysis and management reporting.
- Usecase 2: Generate test case and compare and show it with developer written test case.
- Usecase 3: Performance Optimization Prompt

- Usecase 4: Business Communication and Proposals Proposals
- Usecase 5: Project Planning and other project use cases.
- Usecase 6: Competency Assessment for the team for AI Aided Approach.
- Usecase 7: Using MS Tools empowered with AI Capabilities.

Chapter 04: Prompt Engineering

- What is Prompt Engineering?
- Importance and Applications
- Prompt Design Strategies
- Types of Prompting
- Crafting Effective Prompts
- Parameter Tuning

Chapter 05: Use Cases for Developers

- Prompts for :
- Effective Code Review (Generic C code, CUBAS Code review). Demonstrate the Code
- Review Comments.
- Automatic code generation from natural language descriptions
- Code translation from Java to C
- Automated code review
- Test case generation
- Bug detection and localization
- Automatic documentation from code
- Vulnerability detection
- Generating UI/UX elements

Chapter 06: Personal Chatbots

- Learning Assistant: Facilitating knowledge sharing. Build a learning assistant that
- provides detailed explanations of various topics based on user prompts. For example,
- a user might ask "what is Autosar " and the system should provide a detailed yet
- understandable explanation.
- AI Chatbot: Develop a simple AI chatbot that can handle basic conversational
- prompts and respond accordingly. This can be a general-purpose chatbot or one
- focused on a specific domain, such as Automotive, customer service, or Organisation
- Purpose.