Develop Generative AI Solutions with Azure OpenAI Service (1 Day)

Course Overview

Generative AI is a fast-evolving field of artificial intelligence, and the Azure OpenAI service is subject to frequent changes. The course materials are maintained to reflect the latest version of the service at the time of writing.

Azure OpenAI Service provides access to OpenAI's powerful large language models such as GPT; the model behind the popular ChatGPT service. These models enable various natural language processing (NLP) solutions to understand, converse, and generate content. Users can access the service through REST APIs, SDKs, and Azure OpenAI Studio. In this course, you'll learn how to provision Azure OpenAI service, deploy models, and use them in generative AI applications.

The audience for this course includes software developers and data scientists who need to use large language models for generative AI. Some programming experience is recommended, but the course will be valuable to anyone seeking to understand how the Azure OpenAI service can be used to implement generative AI solutions.

Course Benefits

- Quickly get up and running with the versatile Azure OpenAI Service.
- Gain practical experience with AI model deployment using Azure OpenAI Studio.
- Build advanced natural language processing solutions that can be integrated into your applications.
- Enhance your app's functionality with powerful REST APIs and software development kits from Azure OpenAI.
- Master the art of prompt engineering to augment model performance and response quality.
- Efficiently generate and fine-tune code using the Azure OpenAI service, boosting development productivity.
- Create unique and complex images with the cutting-edge DALL-E model available through Azure.
- Implement Retrieval Augmented Generation (RAG) to enrich AI responses with specifically tailored data, elevating interaction quality.

Prerequisites

Experience in the following *is required* for this AI class:
- Familiarity with Azure and the Azure portal.
- Experience programming with C# or Python.

Course Outline

Get started with Azure OpenAI Service
Access Azure OpenAI Service
Use Azure OpenAI Studio
Explore types of generative AI models
Deploy generative AI models
Use prompts to get completions from models
Test models in Azure OpenAI Studio's playgrounds

Build natural language solutions with Azure OpenAI Service
Integrate Azure OpenAI into your app
Use Azure OpenAI REST API
Use Azure OpenAI SDK

Apply prompt engineering with Azure OpenAI Service
Understand prompt engineering
Write more effective prompts
Provide context to improve accuracy

Generate code with Azure OpenAI Service
Construct code from natural language
Complete code and assist the development process
Fix bugs and improve your code

Generate images with Azure OpenAI Service
What is DALL-E?
Explore DALL-E in Azure OpenAI Studio
Use the Azure OpenAI REST API to consume DALL-E models

Implement Retrieval Augmented Generation (RAG) with Azure OpenAI Service
Understand Retrieval Augmented Generation (RAG) with Azure OpenAI Service
Add your own data source
Chat with your model using your own data