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Sign up

Azure AI Services training

2 days (14 hours)

Presentation

Azure AI Services is a suite of tools and services developed by Microsoft, designed to make artificial intelligence accessible to businesses and developers.

This technology will enable you to create, deploy and manage large-scale AI models using the Azure cloud, with applications ranging from image recognition to text analysis. It fosters innovation by facilitating the integration of AI in various sectors.

During the course, you'll learn about tools like Azure Machine Learning for creating and managing AI models, the development environment and real-life use cases. You'll also learn how to use pre-trained models and deploy your own models for various business applications thanks to a simple, intuitive interface.

The program includes learning about specific Azure AI services such as Computer Vision and Text Analytics. You'll learn how to provision these services, use APIs and SDKs to interact with them, and secure your deployments via identity and access management practices, while integrating responsible and ethical AI practices.

Objectives

- Understand the basic principles of artificial intelligence and Azure AI services
- Create, deploy and manage models with Azure Machine Learning
- Use Azure AI services (Computer Vision, Text Analytics) via APIs and SDKs
- Implementing security practices for Azure AI services
- Deploy and manage Azure AI services in containers for greater flexibility

Target audience

- Developers
- Data Scientists

- AI Engineers
- Project managers

Prerequisites

- A good understanding of the basic concepts of artificial intelligence and machine learning
- Programming skills such as Python, as well as familiarity with REST APIs
- Knowledge of the Azure Cloud environment

Software requirements

- An active Azure account
- We recommend using an IDE such as Visual Studio Code or Jupyter Notebook for AI model development.

OUR TRAINING PROGRAM Azure AI Services

INTRODUCTION TO ARTIFICIAL INTELLIGENCE AND AZURE AI

- Definition and basic principles of artificial intelligence
- Overview of Azure AI services and their applications
- Understanding AI terms and what they mean in Azure
- Issues and challenges for AI engineers
- The importance of responsible AI in technological development

DISCOVER THE CAPABILITIES OF AZURE MACHINE LEARNING

- Introduction to the Azure Machine Learning environment
- Creating, deploying and managing models with Azure ML
- Using Machine Learning tools for practical cases
- Explore the pre-trained models available on Azure

USE OF AZURE AI SERVICES

- Introduction to the various Azure AI services (Computer Vision, Text Analytics)
- Provisioning an Azure AI service resource
- Identification of endpoints and access keys
- Using REST APIs and SDKs to interact with Azure AI services
- Practical work: Using Text Analytics to analyze text sentiment

SECURING

- Understand network authentication and security methods
- Implementing security best practices for Azure AI services
- Access and identity management

MONITORING AND MANAGEMENT

- Cost monitoring and alert creation techniques
- View metrics and manage diagnostic logs
- The importance of continuous monitoring for the performance of AI services

DEPLOYING AZURE AI SERVICES IN CONTAINERS

- Introduction to container fundamentals
- Using containers to deploy Azure AI services
- Advantages of using containers for application isolation and portability
- Practical work: Deploying an Azure AI service in a Docker container

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.