

Build an Azure AI Vision solution with Azure AI services

Build an Azure AI Vision Solution with Azure AI Services is an Applied Skills course focused on developing advanced AI Vision applications using Azure AI Services. Participants will learn about technologies related to image analysis, facial recognition, OCR, classification, and video analysis — as well as the use of generative AI for creating visual content.

The course is delivered in a Distance Learning format and includes a hands-on component with Azure-based labs, along with a Q&A session with a Microsoft expert.



Training recipients

The training is intended for technical professionals who want to develop modern image and video processing solutions using artificial intelligence within the Microsoft Azure environment.

It is especially recommended for:

- Developers and software engineers who want to build AI-powered vision applications.
- AI specialists and data scientists planning to train and deploy custom models for image and text recognition.
- Companies implementing automation and monitoring systems looking to leverage AI for real-time image and video analysis.
- IT teams interested in multimodal applications that combine text, image, and audio within a single solution.
- Individuals developing their skills toward the Azure AI Engineer role, particularly in the area of computer vision applications.



Benefits

- Designing AI Vision solutions – learn how to build applications that analyze images, recognize objects, and process videos using Azure AI Vision and Azure Video Indexer.
- Applying OCR and facial recognition – explore the capabilities of automatic text extraction and responsible face detection and identification with Azure AI services.
- Creating custom vision models – gain hands-on experience in training models for object classification and detection using Azure AI Custom Vision.
- Building generative AI applications with visual features – learn how to implement multimodal models and develop chat-based applications that combine image analysis with graphic generation.
- Enhancing professional skills – apply your knowledge to design scalable AI solutions across various industries, including manufacturing, retail, and education.



Training program

1. Image Analysis with Artificial Intelligence

- Introduction to image analysis capabilities
- Implementing Azure AI Vision resources in your infrastructure
- Practical image analysis using AI
- Exercise – Step-by-step image analysis

2. Text Recognition and Extraction from Images

- Introduction to OCR technology
- Exploring Azure AI options for text recognition
- Text extraction using Azure AI Vision Image Analysis
- Exercise – Text recognition in images

3. Face Detection, Analysis and Recognition

- Introduction to face recognition technology
- Planning solutions for face detection, analysis and recognition
- Face detection and analysis in practice
- Face verification and identification
- Responsible approach to face recognition-based solutions
- Exercise – Face detection and analysis

4. Image Classification with Azure AI Custom Vision

- Introduction to image classification
- Exploring Azure AI Custom Vision capabilities
- Training an image classification model
- Creating a client application for image classification
- Exercise – Image classification

5.Object Detection in Images

- Introduction to object detection
- Using Azure AI Custom Vision for object detection
- Training an object detector
- Developing a client application for object detection
- Exercise - Object detection in images

6.Video Analysis with Azure Video Indexer

- Introduction to video analysis
- Exploring Azure Video Indexer capabilities
- Extracting custom insights from video
- Using Video Analyzer widgets and API
- Exercise - Video content analysis

7.Building Generative AI Applications with Vision Capabilities

- Introduction to multimodal AI models
- Implementing a multimodal model
- Developing a chat application with vision capabilities
- Exercise - Creating a chat application with vision features

8.Image Generation Using Artificial Intelligence

- Introduction to AI image generation
- Exploring image generation models
- Exploring image generation models in Azure AI Foundry portal
- Creating a client application using an image generation model
- Exercise - Image generation using AI



Expected preparation of the participant

- Familiarity with Microsoft Azure and navigation of the Azure portal
- Proficiency in either C# or Python programming language
- Understanding of JSON and REST programming semantics
- Completion of the introductory courses for C# or Python to gain necessary programming skills
- Consideration of completing the Azure AI Fundamentals (AI-900) certification for an overview of AI capabilities on Azure, if new to artificial intelligence.



Training Includes

Training method:

Theory, demo, exercises



Duration

1 days / 7 hours

Language

- **Szkolenie:** English
- **Materiały:** English