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Sign up

Mediapipe training

2 days (14 hours)

Presentation

Our Mediapipe training course will give you an in-depth understanding of Mediapipe and its applications.

This training program will cover fundamental and advanced aspects of Mediapipe, providing you with a solid understanding and practical skills to master object detection and recognition techniques.

You'll have in-depth knowledge of text and audio processing features with MediaPipe, deploying Mediapipe applications on various platforms, including Android, iOS and the web.

Our training will enable you to discover the key concepts of generative AI and LLM interference, and acquire practical skills for integrating and deploying Mediapipe applications.

During this training course, we'll be using the latest Mediapipe resources.

Objectives

- Gain an in-depth understanding of MediaPipe and its applications
- Master object detection and recognition techniques
- Explore text and audio processing features with MediaPipe
- Learn how to deploy MediaPipe applications on different platforms
- Acquire practical skills

Target audience

Developers

Software engineers

Prerequisites

- Basic knowledge of programming and data manipulation is recommended
- Previous knowledge of AI and image processing concepts would also be beneficial, but is not essential.

MEDIAPIPE TRAINING PROGRAM

INTRODUCTION TO MEDIAPIPE

- Introducing MediaPipe and its ecosystem
- Overview of computer vision and Al solutions
- Installation and configuration of a development environment for MediaPipe
- Overview of the main MediaPipe models and applications
- The importance of MediaPipe in today's Al context

OBJECT DETECTION AND RECOGNITION WITH MEDIAPIPE

- Understanding object detection and landmark detection
- Implementing face detection and face cues
- Using hand and pose mark detection
- Image segmentation and interactive segmentation in MediaPipe
- Case studies: implementing gesture recognition solutions

WORK ON TEXT AND AUDIO

- Text classification and integration with MediaPipe
- Language detection and practice with concrete examples
- Introduction to audio classification and its applications
- Practical exercises in the application of text and audio classification

MEDIAPIPE FOR MOBILE AND WEB PLATFORMS

- Configuring and deploying MediaPipe applications on Android
- Installing and using MediaPipe with Python
- Integrating MediaPipe into web applications
- Setting up MediaPipe on iOS devices
- Hands-on workshops: developing cross-platform MediaPipe applications

TASKS RELATED TO GENERATIVE IA AND LLM INFERENCE

- Introduction to generative AI and image generation with MediaPipe
- Using large language models for text generation
- Practical projects: creating applications using generative AI
- Discussion of current and future trends in generative AI

APPLICATION INTEGRATION AND DEPLOYMENT WITH MEDIAPIPE

- Best practices for integrating MediaPipe into real-life projects
- Solving common problems and troubleshooting
- Strategies for keeping up to date with MediaPipe developments
- Case studies: analysis and critique of existing applications using MediaPipe
- Closing session: sharing experiences and networking

Companies concerned

This training 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.