

Updated on 14/11/2023

Sign up

ARKit training: Augmented reality on iOS

2 days (14 hours)

Presentation

Our ARKit training course offers you an exceptional opportunity to gain in-depth expertise in Apple's latest augmented reality framework. Renowned for its quality and versatility, ARKit plunges you into the captivating world of the fusion of the virtual and the real.

During this training course, you'll discover the intricacies of configuration, optimization, and development with ARKit 6. This will ensure your total mastery of this innovative technology, particularly designed for AR experiences on iOS devices.

This course will help you strengthen your IT skills, improve the performance of your applications, and give you access to advanced development and optimization techniques.

You'll be able to create innovative applications, integrating ARKit into your working environment, whether by exploiting the framework's native features or integrating SDKs and add-ons

This training session will take place on the latest ARKit version and resources.

Objectives

- Mastering the fundamentals of ARKit
- Developing advanced AR experiences
- Deploying and optimizing secure AR applications

Target audience

IT engineers

Prerequisites

- Experience with Apple operating systems and technologies
- Basic knowledge of programming and software development concepts would be a plus

ARKit training program

Introduction to ARKit

- Defining ARKit and its role in application development
- History of augmented reality and its evolution up to ARKit
- Benefits and opportunities
- Installation and configuration
- Overview of basic concepts
 - follow-up
 - environment detection
 - user interaction

Fundamentals of AR experience creation

- Understanding coordinates and space in the AR world
- Using cameras and sensors
- Creating virtual objects
 - geometry
 - materials
 - textures
- Introduction to gestures and user interaction
- Light and shadow management
- Performance optimization
- [PRACTICE] Designing a simple AR experience

Advances in AR development

- Integration of image recognition and plane detection
- Advanced use of anchors
- Creating animations and transitions
- Personalizing user interactions
- Exploiting ARKit 6 functionalities for collaborative experiences
- Integration of persistent augmented reality

Deployment and optimization

- Safety and protection
- Using profiling tools
- In-depth testing and debugging
- Implementation of updates and continuous improvements

Case studies and real-life projects

- Exploring AR projects in different industries
- Integrating augmented reality into existing applications
- Collaboration with other emerging technologies (Al, IoT)
- Project presentation and constructive feedback

Advanced prospects

- LiDAR Scanner
- Front and rear simultaneity
- Video capture enhancements
- People Occlusion
- New Motion Capture features
- Scene geometry
 - Creation of a detailed map of the space with identification of key elements

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.

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.