

AI CERTS[®]

AI+ Video[™]

Certification



Executive Summary

The AI+ Video certification provides professionals with the expertise to leverage artificial intelligence in video production, enhancing both the creation and analysis of content. It focuses on AI-driven tools for editing, personalization, and real-time video insights. Participants will gain proficiency in automating processes, improving video quality, and utilizing data to boost audience engagement. Additionally, the certification addresses ethical considerations, privacy concerns, and the evolving role of AI in the media landscape. Targeted at content creators, marketers, and technology professionals, this certification ensures participants are well-equipped to navigate the growing intersection of AI and video technology.

Prerequisites

- **Basic Video Editing Skills:** Familiarity with video editing software is essential.
- **Understanding of AI Concepts:** Basic knowledge of artificial intelligence principles.
- **Familiarity with Data Analytics:** Comfort with data-driven decision-making and analysis.
- **Experience with Content Creation:** Hands-on experience in producing digital media.

Exam Blueprint

Number
of Questions

50

Passing
Score

35/50 or 70%

Duration

90 Minutes

Format

**Online via AI
Proctoring platform**

Question Type

**Multiple Choice/Multiple
Response**

Exam Overview

Module	Weight
Foundations of AI in Video Integration	7%
Preparing Video Data for AI	15%
Machine Learning for Video Analysis	15%
Generative AI in Video	15%
Enhancing Video with AI	12%
Interactive and Immersive AI Video	12%
AI in Video Surveillance and Compliance	12%
Future of AI+ Video	12%
	100%

 AI CERTs®
The logo features a stylized 'AI' icon with a plus sign, followed by the text 'CERTs' with a registered trademark symbol. AI⁺
Video™
The logo consists of the text 'AI' with a plus sign as a superscript, followed by 'Video' and a trademark symbol.

Certification Modules

Module 1

Foundation of AI in Video Integration

1.1 Basics of Video Processing

1.2 Introduction to AI in Video

1.3 Toolkits and Framework

1.4 Use Case: AI-enhanced Video Compression for Streaming Platforms

1.5 Case Study: YouTube's AI-Driven Transcoding System

Module 2

Preparing Video Data for AI

2.1 Data Preparation for AI Models

2.2 Preprocessing and Augmenting Frames

2.3 Storage and Workflow Management

2.4 Use Case: Building AI-ready Video Datasets for Autonomous Driving Applications

2.5 Case Study: Tesla's In-house Pipeline for Labeling Driving Scenarios across Multiple Geographies using Video Footage

2.6 Hands-On: Video Annotation using CVAT Tool, and Organizing them for Model Training

Module 3

Machine Learning for Video Analysis

3.1 Video Classification and Tagging

3.2 Object Detection and Movement Tracking

3.3 Action and Behavior Recognition

3.4 Use Case: Smart Surveillance Systems Detecting Abandoned Objects in Real Time

3.5 Case Study: Dubai Smart City's AI Implementation for Object Recognition

3.6 Hands-On: Train YOLOv8 on Sample Security Footage to Detect and Track Objects

Module 4

Generative AI in Video

4.1 Generating Synthetic Video with GANs

4.2 AI-Driven Animation and Avatars

4.3 Ethical Use of Generative Content

4.4 Use Case: Auto-Generation of Product Explainer Videos using Avatars and Synthesized Narration

4.5 Case Study: Synthesia's Solution Enabling Businesses to Create AI-Driven Training and Marketing Videos

4.6 Hands-On: Generate a Deepfake or AI Avatar using AKOOL, and Explore Face Alignment and Identity Swapping

Module 5

Enhancing Video with AI

5.1 Super-Resolution and Restoration

5.2 Real-Time Video Enhancement

5.3 Making Video More Inclusive

5.4 Use Case: Streaming Platforms using AI to Enhance Resolution and Reduce Latency for Mobile Users.

5.5 Case Study: DeOldify's Impact in Reviving Historical Video Archives by Upscaling and Colorizing Black-and-White Footage.

5.6 Hands-On: Use AI4Video to Enhance a Sample Low-Resolution Black-and-White Video and Visualize Improvement

Module 6

Interactive and Immersive AI Video

6.1 AI in AR and Mixed Reality

6.2 Intelligent Video Editing

6.3 Viewer Engagement & Adaptation

6.4 Use Case: Live Sports Broadcasters using AR to Overlay Player Stats during Gameplay

6.5 Case Study: NFL and AWS Collaboration to Deliver Real-Time Performance Insights via Augmented Visuals.

6.6 Hands-On: Creating a Highlight Video from a Video Clip using Clipchamp

Module 7

AI in Video Surveillance and Compliance

7.1 Security and Monitoring Systems

7.2 Automated Content Moderation

7.3 Addressing Privacy and Ethics

7.4 Use Case: Automated Real-Time Access Control in Corporate Offices Using Facial Authentication.

7.5 Case Study: Amazon Go's Cashier-less Stores Using Computer Vision for Security and Consumer Behavior Tracking

7.6 Hands-On: Implement Facial Detection and Access Control Simulation using OpenCV and a Basic Recognition Model

Module 8

Future of AI+ Video

8.1 Trends and Emerging Technologies

8.2 AI Applications by Industr

8.3 Careers and Professional Growth

Certification Outcome

Upon completing the AI + Video certification, participants will gain a comprehensive understanding of how artificial intelligence can enhance video technologies. The course covers areas such as video analysis, object detection, facial recognition, and video enhancement. Learners will acquire hands-on experience with AI-driven tools and APIs for tasks like automated video editing, content moderation, and real-time video processing. The program also addresses important issues like ethical implications, privacy concerns, and bias reduction in AI systems. By the end of the course, participants will be equipped to drive innovation and lead in the rapidly advancing field of AI-powered video technologies.



Market Insight

AI-driven video technologies are revolutionizing industries like entertainment, security, and marketing. The demand for skilled professionals in AI-powered video applications is rapidly growing, offering numerous career opportunities in a thriving, innovative field.



Value Proposition

This certification equips participants with in-demand skills in AI video analysis, video editing automation, and real-time video processing, making them highly valuable to employers in a wide range of industries.



Additional Features

Gain access to hands-on projects, real-world case studies, and exclusive AI tools. Participants also benefit from post-certification support, career guidance, and networking opportunities within the AI video technology community.

AI Experts



Jason Kellington

AI Expert

As a consultant, trainer, and technical writer with more than 25 years of experience in IT, I specialize in the development and delivery of solutions focused on effective and efficient enterprise IT.



Justin Frébault

AI Expert

I'm a boutique data consultant specializing in data mesh and lakehouse solutions. I've dedicated my career to helping organizations transform their approach to data, moving beyond mere knowledge.



J Tom Kinser

AI Expert

I have over forty years of experience in software development, data engineering, management, and technical training. I am a Microsoft Certified Trainer and a software developer, holding multiple certifications.



Terumi Laskowsky

AI Expert

Country Manager for Global Consulting Services in Japan, Specialties: Information Security (Compliance, Policy, Application, Host, Network)

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