AI+ Video

Category: AI, Data & Analytics | **Vendor:** AI Certs

Duration: 1.00 hours (1 days) **0.8 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format:	vILT
Certification:	AI+ Video
Related Exam:	AI-VID

Course Overview

The AI+ Video™ course provides an in-depth, instructor-led exploration of AI-powered video processing, analysis, and generation. The curriculum covers foundational video processing, dataset preparation, object detection, action recognition, generative video models, AR/VR overlays, and automated compliance systems. Participants work directly with tools like YOLOv8, CVAT, OpenCV, and AI4Video to build intelligent video pipelines. Industry case studies from YouTube, Tesla, Dubai Smart City, and Amazon Go demonstrate enterprise-grade implementations. The course equips professionals with technical skills needed to deploy and optimize AI-driven video systems across sectors.

About This Course

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Prerequisites & Entry Requirements

General 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

Learning Outcomes

Upon successful completion of this course, participants will be able to:

Understand the fundamentals of video processing and AI-based visual analysis

Build ML and deep learning models for object detection, tracking, classification, and behavior recognition

Apply generative AI techniques to create synthetic video, avatars, and animation

Enhance video quality using AI-driven restoration, noise reduction, and super-resolution tools

Develop intelligent video pipelines for AR overlays, security systems, compliance, and automation

Detailed Course Outline

Foundation of AI in Video Integration

Basics of Video Processing

Introduction to AI in Video

Toolkits and Framework

Use Case: AI-enhanced Video Compression for Streaming Platforms

Case Study: YouTube’s AI-driven Transcoding System Automatically Optimizes Video Quality based on Device and Internet conditions

Preparing Video Data for AI

Data Preparation for AI Models

Preprocessing and Augmenting Frames

Storage and Workflow Management

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

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

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

Machine Learning for Video Analysis

Video Classification and Tagging

Object Detection and Movement Tracking

Action and Behavior Recognition

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

Case Study: Dubai Smart City’s AI Implementation for Object Recognition and Suspicious Behavior Detection in Public Transport Hubs

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

Generative AI in Video

Generating Synthetic Video with GANs

AI-Driven Animation and Avatars

Ethical Use of Generative Content

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

Case Study: Synthesia’s Solution Enabling Businesses to Create AI-driven Training and Marketing Videos in Multiple Languages.

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

Enhancing Video with AI

Super-Resolution and Restoration

Real-Time Video Enhancement

Making Video More Inclusive

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

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

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

Interactive and Immersive AI Video

AI in AR and Mixed Reality

Intelligent Video Editing

Viewer Engagement & Adaptation

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

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

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

AI in Video Surveillance and Compliance

Security and Monitoring Systems

Automated Content Moderation

Addressing Privacy and Ethics

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

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

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

Future of AI+ Video

Trends and Emerging Technologies

AI Applications by Industry

Careers and Professional Growth

□□ Certification Path

AI+ Video

Exam: AI-VID

Frequently Asked Questions

Q: What delivery options are available for AI+ Video?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: What certification does this course prepare me for?

The AI+ Video course helps prepare you for the AI+ Video certification path.

Q: Which exam does this course prepare me for?

This course prepares you for the AI-VID official exam. You can take this exam at any exam center across United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online wherever you are located.

Q: How many CPD hours does this course provide?

The 1-day AI+ Video course provides up to 0.8 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the AI+ Video training?

The training takes place over 1 day(s), with each day lasting approximately 1.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for AI+ Video?

Yes, we provide corporate training, dedicated training, and closed classes for AI+ Video. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: AI+ Video, AI Certs, vILT

Q: Why choose Nexus Human for AI+ Video?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your AI+ Video training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

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