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Sign Up

ComfyUI Training: AI Image and Video Generation

3 days (21 hours)

Overview

ComfyUI is an open-source, node-based interface that allows you to design advanced workflows for generating images and videos using artificial intelligence.

This ComfyUI training course will teach you how to create, customize, and reuse generation workflows to precisely control your visual output and automate various stages of your creative process.

You'll learn to generate images using models such as FLUX and Krea, master generation parameters, and apply image-to-image, inpainting, outpainting, and upscaling techniques.

The course also covers AI-powered video generation using models such as Seedance and MiniMax Hailuo. You'll learn to design image-to-video workflows and adapt their execution to available hardware resources.

By the end of the course, you'll be able to build modular and reproducible ComfyUI workflows, optimize your generations based on your GPU's capabilities, and set up a production pipeline that combines AI-generated images and video.

Like all our courses, this one will introduce you to **the latest stable version** of the technology and its new features.

Objectives

- Understand how ComfyUI and its node-based workflow system work

- Create and customize AI image generation workflows
- Use models such as FLUX and Krea to produce controlled visuals
- Master image-to-image, inpainting, outpainting, and upscaling
- Create video generation workflows using models such as Seedance and MiniMax Hailuo
- Optimize and scale workflows based on available hardware resources

Target Audience

- Graphic Designer
- Designers
- Motion designer
- Content creator
- Audiovisual professional
- Marketing and communications professional

Prerequisites

- Knowledge of the basic principles of generative AI
- Experience with tools for creating or generating digital images
- Knowledge of the basic principles of prompting
- No advanced programming skills are required

Technical Prerequisites

- Computer running Windows 10 or Windows 11 with a CUDA-compatible NVIDIA graphics card
- At least 32 GB of RAM and 12 GB of VRAM are recommended for running image generation workflows locally
- Since video generation requires significant GPU resources, the relevant exercises may rely on remote services, APIs, or suitable GPU infrastructure
- At least 50 GB of available space on an SSD for generated models and files
- A recent version of Google Chrome and a stable internet connection
- Unrestricted access that does not block the download of models or the services used during the exercises

Our ComfyUI Training Program: AI Image and Video Generation

[Day 1 - Morning]

Getting Started with ComfyUI and Node-Based Workflows

- ComfyUI’s place in the generative AI ecosystem and professional use cases
- Workflow architecture: nodes, inputs, outputs, connections, and execution queue

- Installation, getting started, interface management, and workspace organization
- Understanding models, checkpoints, VAE, CLIP, and resource directories
- Hardware configuration: GPU, VRAM, RAM, and constraints of local generation
- Hands-on workshop: Importing, running, modifying, and saving your first reusable workflow

[Day 1 - Afternoon]

Generating controlled images with AI models

- Building a text-to-image pipeline with model loading, encoding, and decoding
- Discover and use image generation models such as FLUX and Krea
- Write structured prompts and tailor instructions to the model being used
- Adjust generation parameters: seed, sampler, scheduler, steps, resolution, and guidance
- Compare outputs and diagnose discrepancies in quality, style, and composition
- Hands-on workshop: Build and save an image generation workflow to produce a series of consistent visuals

[Day 2 - Morning]

Compose, retouch, and refine the generated visuals

- Use image-to-image workflows to transform an existing image
- Master denoising to balance fidelity to the source with creative freedom
- Implement inpainting and outpainting to correct or extend an image
- Use reference images to control pose, contours, depth, and composition
- Improve resolution with upscaling and refinement passes while managing VRAM usage
- Hands-on workshop: Create and adapt a visual while maintaining its composition and graphic consistency

[Day 2 - Afternoon]

Creating AI videos with ComfyUI

- Understand text-to-video and image-to-video approaches available in ComfyUI
- Discover and use video models such as Seedance and MiniMax Hailuo
- Prepare the source image, desired movement, framing, duration, and generation instructions
- Adjust settings that affect resolution, smoothness, temporal consistency, and the final render
- Understand the high hardware requirements for video generation and prioritize remote GPU resources or APIs when the local configuration is insufficient

- Hands-on workshop: Design an image-to-video workflow and compare different generation settings

[Day 3 - Morning]

Optimize and structure production workflows

- Build modular workflows to facilitate their maintenance, sharing, and evolution
- Organize nodes, groups, variables, and reusable components to standardize production
- Optimize execution based on available resources: memory, VRAM, resolution, and models
- Distinguish between use cases suitable for local image generation and those requiring remote GPU resources
- Prepare image and video exports: formats, naming conventions, archiving, and parameter traceability
- Hands-on workshop: Optimize an existing workflow to reduce generation times and facilitate its reuse

[Day 3 - Afternoon]

Scaling a creative project with ComfyUI

- Build a production pipeline combining image generation and video creation
- Selecting models and execution methods based on expected quality and available resources
- Create reproducible workflows to automatically generate different versions of a piece of content
- Identify best practices for rights, privacy, and validation of generated content
- Document the models, parameters, and dependencies required to share a workflow
- Hands-on workshop: Create a complete workflow for converting an image to video, export it, and document the process for its reuse

Target Audience

This training is intended for both individuals and companies—large and small—that wish to train their teams in new, advanced IT technologies or to acquire specific industry knowledge or modern methods.

Assessment at the Start of Training

The pre-training assessment complies with Qualiopi quality standards. Upon final registration, the learner receives a self-assessment questionnaire that allows us to evaluate their estimated proficiency with various types of technologies, as well as their expectations and personal goals for the upcoming training, within the limits imposed by the selected format. This questionnaire also enables us to anticipate certain connection issues or

internal security issues within the company (in-house or virtual classroom) that could hinder the monitoring and smooth operation of the training session.

Teaching Methods

Hands-On Course: 60% Hands-On, 40% Theory. Training materials distributed in digital format to all participants.

Organization

The course alternates between theoretical input from the instructor—supported by examples and reflection sessions—and group work.

Assessment

At the end of the session, a multiple-choice quiz is administered to verify that participants have successfully acquired the skills.

Certification

A certificate will be issued to each trainee who has completed the entire training program.

Training organization registered under number 11 75 54743 75. This registration does not constitute state accreditation.
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