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# Stable Diffusion XL training: Master the art of AI-based image generation

2 days (14 hours)

## Presentation

Discover the future of content creation with Stable Diffusion XL! Learn how to quickly generate high-quality images and explore the infinite possibilities of this revolutionary technology.

Our Stable Diffusion XL training course will introduce you to the world of [artificial intelligence](#) applied to image generation. You'll master the fundamental concepts and techniques essential for creating artistic, photorealistic images and more.

In this course, you'll explore the advanced features of Stable Diffusion XL, including the manipulation of hands and text in images, as well as the generation of complex, multi-plane content.

You'll also learn how to take advantage of the latest enhancements to Stable Diffusion XL, including optimized management of short orders for impressive results.

Like all our training courses, this one will introduce you to the [latest resources](#) from Stable Diffusion.

## Objectives

- Understanding the basics of Stable Diffusion XL and its benefits
- Master the advanced features of Stable Diffusion XL
- Practical application of Stable Diffusion XL in creative projects
- Customize and integrate Stable Diffusion XL

## Target audience

All audiences.

## Prerequisites

- Modern CPU
- 16 GB RAM
- 256 GB SSD
- 8 GB VRAM

## Stable Diffusion XL training program

### Introduction to Stable Diffusion XL

- Understanding Stable Diffusion XL
- Recent technological developments
- Applications in image generation
- Advantages of Stable Diffusion XL
- Methodologies
- Resources
- Tool installation

### Enhanced Stable Diffusion features

- Improved handling of hands in images
- Text generation in images
- Complex image composition
- Advanced command interpretation
- Image size
- Device optimization

### Practical use of Stable Diffusion XL

- Short orders
- Inpainting techniques
- Extending images with Outpainting
- Prompting a new image with Image-to-image
- Examples of creative projects
- Ethical and legal considerations

### Personalization

- Customizing API solutions
- Integration into enterprise environments
- Using the scalable Stable Diffusion XL platform

- Specific use cases
- Extended image and text generation
- Advanced compression and accessibility

## Advanced techniques

- Advanced use of Inpainting
- Creating images with complex commands
- In-depth customization of results
- Integration of external algorithms
- Use of pre-trained models
- Quality management of generated images

## Practical projects and applications

- Create a gallery of artistic images
- Photorealistic content design
- Automated miniature generation
- Illustration creation
  - Blog posts
  - The articles
- Development of a customized image generation application
- Collaboration on creative projects

## 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.

## 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 enabling 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 with regard to 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 inputs from the trainer supported by examples and

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.