+33 (0)1 48 10 09 46
formation@ambient-it.net 140 Avenue Jean Lolive 93500 Pantin - France

Updated on 11/02/2025

Sign up

OpenAI training

3 days (21 hours)

Presentation

Our OpenAI training course will enable you to master its entire toolbox: ChatGPT4o, Whisper, CLIP, DALL-E and GPT. These new-age tools will your organization's content production tenfold.

, this is a major technological revolution of the 21? century, artificial intelligence generation now within everyone's reach, whether for :

- Images with the DALL-E generator
- Texting with ChatGPT, moreover, is a virtual assistant with almost infinite functionality.
- Text via audio for Whisper
- Text accompanied by images with CLIP

Mastering these tools will give you an essential competitive edge, in skills that will become essential in the coming years.

Our training course will teach you the fundamentals of the GPT-4 language model. You'll learn how to complete, generate and modify text, transcribe audio into text and generate images.

At the end of this course, you'll know how to use the OpenAI toolbox to create content quickly and easily.

Objectives

- Understanding the basics of GPT
- Generating and editing text
- Create your images automatically
- Generate text from audio

Target audience

- Developers
- Designers
- Project managers
- Data analysts
- Data scientists
- Editor
- Content manager
- Traffic manager

Prerequisites

You need to have the paid version of ChatGPT and make an initial payment (of at least $5) to the OpenAI API account.

OpenAI API training program

Introduction to the OpenAI API

- Introducing the OpenAI API and its features
- Obtaining and configuring an API key
- Ethics and data security
- Cost management and best practices

Development environment

- Installing Python and the required dependencies
- Creating and managing a virtual environment
- Installing OpenAI libraries and configuring APIs
- Testing the API with simple requests

GPT-4: Understanding and using the language model?

- How GPT-4 works and how it differs from previous versions
- Text generation and completion
- Response control
- Conversation optimization and context management

DALL-E: Image generation and manipulation

- DALL-E presentation and use cases
- Image generation from text

- **Image parameterization and quality control**
- Content filter
- List of all models
- Which model to use?

Using GPT text completion

- Example of basic completion
- Checking the number of output tokens
- Logprobs
- Creative control: sampling temperature
- Sampling with "top_p
- Distribution of results
- Repeatability control: frequency and presence penalties
- Controlling the number of outputs
- Obtaining the "best" result
- Control when completion stops
- Using the suffix after text completion
- Practical examples

Text editing with GPT

- Example: Text translation
- Instruction is required, entry is optional
- Modification using the completion endpoint and vice versa
- Output formatting
- Creativity vs. well-defined answers
- Generating multiple modifications

Advanced examples of text manipulation

- Linking completions and modifications
- Apple the company vs Apple the fruit (Context Stuffing)
- information on crypto-currencies based a scheme (Context stuffing)
- Creation of a chatbot assistant to help with Linux commands

Integration

- Integration overview
- Use cases
- Requirements
- Understanding text integration
- Integrations for multiple inputs
- Semantic search
- Cosine similarity

Advanced integration examples

- Example: Predicting your favorite coffee
- Perform a "fuzzier" search
- Predicting news category using integration
- Assessing the accuracy of a zero-shot classifier

Refining and best practices

- A few shots to learn
- Improved learning with just a few shots
- Practical refining
- Data sets, prompts and completions: what are the best practices?

Example of advanced refinement: drug classification

- Data set used in the example
- Data preparation and start of refinement
- Testing the refined model
- Example of advanced refinement: creating a chatbot assistant
- Interactive classification
- Creating a conversational Web application

Intelligent speech recognition with OpenAI Whisper

- What is Whisper?
- How do I get started?
- Transcription and translation

Background and brief: making AI more real

- The problem
- No context = random chaos
- History = context
- The problem of preserving history
- LIFO memory (last in, first out)
- The LIFO memory problem
- Selective context

Create your own AI-based voice assistant

- Introduction
- Audio recording
- Audio Transcription
- Response to user request
- The main function
- Putting it all together

- Generating better responses

Image classification with OpenAI CLIP

- What is CLIP?
- How do I use CLIP?
- Stable reverse distribution: from image to text

Image generation with DALL-E

- Example of image generation from an invitation
- Generate multiple images
- Use of different sizes
- Best picture invitations
- Creating a random image generator

Image editing with DALL-E

- Example of image modification

Drawing inspiration from other images

- How do you create a variation of a given image?
- Use cases for image variations

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 which enables 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 for 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 training: 60% Practical, 40% Theory. Training material distributed in

to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, 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.

Training organization registered under number 11 75 54743 75. This registration does not imply government approval.
Ambient IT 2015-2025. All rights reserved. Paris, France - Switzerland - Belgium - Luxembourg