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Sign up

Advanced Generative AI Training

1 day (7 hours)

Overview

Generative artificial intelligence is transforming the way we work and now requires professionals to have advanced technical expertise to turn it into a real performance driver. This intensive training is designed for regular users (ChatGPT, Copilot, Claude...) who want to go beyond basic daily use, understand the inner workings of the models, and take their productivity to the next level.

During this training, you will explore how LLMs actually work to anticipate their limitations and master the “invisible framework” of their responses (system prompts, custom instructions).

You will also learn to establish a secure usage framework by implementing systematic quality control over AI outputs. You will learn to validate the compliance of your practices (GDPR, AI Act, handling of sensitive data) and master the essential fact-checking, thereby reaffirming that responsibility and ultimate expertise remain fundamentally human.

Objectives

- Understand how LLMs actually work (prediction mechanisms, hallucinations, generation parameters) to anticipate their strengths and limitations.
- Identify the invisible framework that structures an AI assistant’s responses (system prompts, custom instructions, automatically triggered tools).
- Design effective, robust, and reusable prompts (the four levers of the prompt + advanced techniques: chain of thought, few-shot).
- Adopt an ethical approach and implement systematic quality control for AI outputs (GDPR, bias, fact-checking, AI Act framework).

Target Audience

- Regular users of generative AI tools (Copilot, ChatGPT, Claude…) who wish to deepen their mastery.

Prerequisites

- Regular use of at least one generative AI tool (ChatGPT, Copilot, Claude, etc.).
- Proficiency with digital office tools.

Curriculum for our Advanced Generative AI Training

[Day 1 - Morning]

Under the Hood of LLMs

- How an LLM generates a response: statistical prediction of the next word, not information retrieval.
- Why a confident tone is not an indicator of reliability: the mechanics of hallucinations, areas of (specialized topics, precise figures, recent news).
- Limitations to be aware of: context window (what the model “sees” of a conversation) and loss of thread in long exchanges.
- The model’s internal parameters (temperature, top-p, top-k): what was behind the old Copilot modes and what remains valid for all LLMs.
- The five habits to incorporate into your routine to distinguish what AI does well from what it does poorly.
- Hands-on workshop: compare the reliability of a response based on the specificity of the question, then vary the model’s behavior by simulating temperature in the prompt.

The invisible framework: system prompt and ecosystem

- The hidden architecture of a conversation: system prompt vs. user prompt vs. custom instructions.
- The “walls and furniture” metaphor: what is set by the provider (the walls) and what you can arrange yourself (the furniture).
- The limitations of consumer interfaces (priority of the system prompt, non-bypassable safeguards) compared to what is possible via API.
- Custom instructions as a true lever for personalization: one-time configuration, lasting effect on all conversations.
- The transparent ecosystem around the LLM: image generation, code execution, web search, vision, voice — triggered automatically without the user having to specify it.
- Hands-on workshop: test the system prompt’s priority against persistent prompts, then configure your own custom instructions tailored to your business.

[Day 1 - Afternoon]

Prompt engineering: designing prompts that work

- Diagnosis: why the same prompt produces such different results from one use case to another.
- The anatomy of an effective prompt: the four levers (context, task, format, constraint) reinforced by the role assigned to the model.
- Iterative method: moving from a naive prompt to a structured prompt, and knowing how to correct rather than
  starting over.
- Common mistakes to avoid (vague wording, contradictory instructions, over-reliance on a specific model).
- Two advanced techniques: Chain of Thought (guiding the AI's reasoning step by step) and Few-shot (guiding by example).
- Scaling up your practice: building a library of reusable prompts for recurring business tasks.
- Hands-on workshop: reformulate a naive prompt into a structured prompt for a concrete business case, then
  solve a problem by asking the AI to explain its reasoning and to draw on the provided examples.

Ethics, GDPR, and Quality Control

- Three distinct aspects of AI ethics: model training (where does the data come from, what biases exist), everyday use (what happens to what I type), and the legal framework (GDPR, AI Act).
- The four questions to ask before sending a sensitive prompt: personal data, professional confidentiality , intellectual property, use of placeholders.
- Choose the tool appropriate for the sensitivity of the data: consumer-grade for general use, enterprise version for internal use, dedicated hosting for highly sensitive data.
- Biases in generative models: recognize, anticipate, correct—especially regarding
  of images.
- Quality control as a non-negotiable reflex: fact-checking, cross-referencing sources, validation by a subject matter expert. Responsibility for published content remains human and cannot be delegated to the machine.
- Hands-on workshop: generate an image, identify its default biases, and correct them through iteration; verifying a numerical claim produced by AI by cross-referencing it with a primary source.

Target Audience

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

Placement at the Start of Training

The assessment upon enrollment 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 technology, as well as their expectations and personal goals for the upcoming training, within the limits imposed by the selected format. This questionnaire also allows us to anticipate certain connection or internal security issues within the company (intra-company or virtual classroom) that could pose challenges for monitoring and ensuring the smooth running of the training session.

Teaching Methods

Practical Course: 60% Practical, 40% Theory. Training materials distributed in digital format

to all participants.

Organization

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

Assessment

At the end of the session, a multiple-choice questionnaire verifies that the skills have been properly acquired.

Certification

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