

Quickstart guide

GPT@JRC allows you to interact with an Artificial Intelligence through a conversational interface (“chat”).

Through a simple user web interface, you can work with different Large Language Models (LLMs).

Large Language Models (LLMs) can be described as versatile “digital brains” on which many real-life applications can be built. To put in a simplified way, Large Language Models are computer programmes that have “seen” so many pieces of text, that they are able to follow the human understanding of language and their underlying concepts (and they can do that in 100+ languages at the same time!). They are general purpose systems that can be used to carry out a wide range of tasks, from translating text, drafting documents to writing poems, generating minutes or helping in brainstorming, or assisting with software development.

The key concept for interacting with GPTs is the instruction a user provides to it, which is called a **Prompt**.

e.g. *Please draft a summary of Shakespeare's Hamlet play.* When interacting with chat models, it is possible to provide further instructions to refine your requirements, e.g. *Please be more concise, and draft it in a language adapted to 11 year olds*

To get started in GPT@JRC, **simply type your first Prompt in the *Send a Message* text box** at the bottom of the application, then go on with the conversation as if you were chatting with someone else. See some examples below.

GPT@JRC provides access to a large palette of models, from the well-known Open AI GPT models (those behind ChatGPT), to more open and/or experimental ones.

Make good use of the ***New chat* button** on the left-hand side in order to test, evaluate, benchmark, ... until you find the model that best fits your needs

Here are some examples of Prompts you may get inspiration from, depending on what you need AI to help you doing:

Draft text for communication purposes	Please draft a 400 words text introducing the European Commission's Joint Research Centre to executives from European Small and Medium Enterprises
Get quickly some basic understanding about a subject	What is green hydrogen? What are European Union policies about it?

Get more efficient in IT coding	Please draft a function in python that calculates the average of a list of numerical values called MyValues. Please don't forget import clauses if you use external libraries
Obtain some simple brainstorming ideas	I am a team leader, my team is geographically spread, so we work mostly on an hybrid environment. What are the top 5 actions I could take to increase my team's cohesion?
Analyse a piece of text	In the following article, how is the EU depicted? Please provide all occurrences of EU-related entities in the text, with sentiment towards it and justify why this sentiment. Article “[<i>Paste article here</i>]”
... and much more	There many, many tasks where GPT can help you be more efficient. However, there are important precautions to keep in mind. See below.

Please remember that in the current version of GPT@JRC, the answer that the model will provide to you will depend on:

- All the knowledge contained within the huge neural network of the model (many billions of parameters), derived from the vast quantities of data used to train it.
- The information that you provide in your prompt.

To get the best results, you should add as much information as possible in your prompt. For example, if you ask the model to write something for you (like an email or an essay), you can provide not just the instruction, but also:

- A description of the “personality” that you would like the AI to take, which will guide the style of the answer (e.g. “You are an experienced content writer with high level of expertise...”)
- A bullet list of points that you would like the AI to include in the email (e.g. “Please include the following points: 1) xxxx; 2) yyyy;

You can also copy/paste big portions of text (e.g. from a report) and ask the AI model to do something with them. For example, you could ask it to “summarise the following text” or to carry out certain task considering the following text.

The amount of text that you can insert (e.g. copy/paste) into the prompt will depend on the “context-size” of the model, which is indicated in the user interface of the GPT@JRC. The biggest models with a context size of 32k tokens can accommodate up to 11 pages of text.

Practice makes perfect. The more you use the system the better you will become at writing prompts. Advance prompt engineering techniques include few-shot techniques, which essentially means providing a few examples of the task to be carried out (in order to exploit a fascinating property of the LLMs which is called In Context Learning).

It is **important to note some caveats** of this technology while you use it in your professional capacity:

- *Confidentiality and privacy*: although the GPT@JRC has taken specific care of enabling the use of LLMs in full compliance with information security and personal data protection rules in place, please be careful when inputting information in the chat. (see FAQ for more guidance)
- *Intellectual Property*: The output of the system is the result of the input that you provide through the dialog with the model, as well as the knowledge already “contained” within the AI model. As long as the output generated by the AI is original (e.g. because it results from substantial original input provided to it in the prompt), you own the rights of the outputs, or more precisely the EU if you are an EU-staff member. This will be the case, for example, if you request GPT@JRC to translate or modify the style of text drafted by you that you provide as input to the model. For further information about this, please refer to the specific guidance of the EU IP legal advisors.
- *Outdated information*: LLMs are very heavy systems to train, so they are not updated every day. Some prominent models rely on data from before 2021. On a general note, do not rely on LLM answers if you need timely information relying on latest developments (in any case, cross-check output against your latest available trustable information). GPT@JRC team is working on novel system architectures that would make up-to-date information available to GPTs, but it is not the case right now. Stay tuned.
- *Bias and Hallucinations*: LLMs are subject to ideological bias and logical flaws, and are even prone to 'invent' information that is missing (it is called hallucinations). You are responsible of fact-checking and validating the output of LLMs before using it in your professional capacity. Studying such shortcomings of LLMs is one of the *raison d'être* of GPT@JRC, but please use LLMs with caution and reason.

We hope you will find this tool useful. The GPT@JRC team is working hard to improve it regularly, and enable more collective intelligence in the usage of such promising, but also potentially harmful, technologies within the JRC.

Frequently Asked Questions

What can I ask to GPT@JRC?

Anything, provided that it is work-related, lawful, ethical and does not go against your statutory duty of loyalty towards the EU.

Are there limitations on the type of data/information I can use to prompt GPT@JRC?

You may not enter EU Classified Information (EUCI), or any special categories of personal data as defined by the GDPR Regulation 1725/2018. However, you can process Sensitive Non Classified information (SNC) by activating “SNC Mode” in Settings in the user interface. When in

SNC mode, the chat history is disabled and only AI models hosted in the GPT@JRC infrastructure on premises can be selected.

In general, please take care when interacting with models hosted and provided in the cloud (e.g. GPT3.5 and GPT4). Although JRC has a special monitoring opt-out clauses to avoid GPT@JRC user prompts being further processed by third parties, it is preferable to use only publicly available information when using these models hosted in the cloud.

Are my conversations with GPT@JRC stored/seen by others?

Every conversation is stored for 90 days in order to comply with our obligation to monitor the usage of the platform.

Optionally, the user can specifically “opt-in” to allow interactions to be used for research purposes after an anonymisation process.

What happens if my usage of GPT@JRC has unexpected negative consequences?

GPT@JRC is an innovation prototype. Users are warned about the limitations of the current generation of AI models, in particular, about the fact that they can produce imaginary content might not be factual (the so-called “hallucinations”). Therefore, you are required to carefully check the outputs of the system as you are responsible when using them.. In addition, although JRC is committed to ensuring that the availability and the access to the GPT@JRC, it can be interrupted any time without prior notice.

I receive a message that says I have exceed my quota, what should I do?

The usage of GPT@JRC implies spending of public money, so the number of requests per user and per day is limited in a spirit of sound budget consumption. So the simplest thing to do if you get such message is to wait until next day. If you have specific needs that exceed the normal daily request quotas, please contact the GPT@JRC project team JRC-DIR-T-GPT@ec.europa.eu.

What if I encounter some problematic/unsafe/ethically questionable situations while using GPT@JRC?

Please report immediately to the GPT@JRC project team JRC-DIR-T-GPT@ec.europa.eu. Generative AI technology is relatively new and its use implies risks that still needs to be better addressed. One of the motivation

of this project is precisely to enable JRC to gain better knowledge on this matter.

Can I access the various models via Application Programming Interface (API)?

API access is foreseen for GPT@JRC; if you think your research project may benefit it, please contact the project team JRC-DIR-T-GPT@ec.europa.eu in order to explain your goals and needs. We will try to accommodate them taking into account budget and technical constraints, and possibly corporate priorities.

I have technical capabilities to run specialised GPT models, can I make them accessible via GPT@JRC?

Sure! It is one of the goals of GPT@JRC to federate skills, resources and ideas around Large Language Models across the JRC. Please contact the project team JRC-DIR-T-GPT@ec.europa.eu so that we can discuss how we can add your model to the list of available ones.