

Welcome!

Agenda:

- What is Open Source Al?
- Why do we need local Als?
- What do we need to run local Als?
- Demo on a 2015-old laptop

Open Source Al



DEFINITION

PROCESS

TIMELINE

FAQ

ENDORSEMENTS

Read version 1.0

Why Open Source AI needs a definition?



Open Source Frontier

The traditional view of Open Source code and licenses when applied to Al components are not sufficient to guarantee the freedoms to use, study, share and modify the systems.



Informing Regulators

Government regulations have begun in Europe, the United States, and elsewhere.

Communities need a common understanding to educate policy makers.

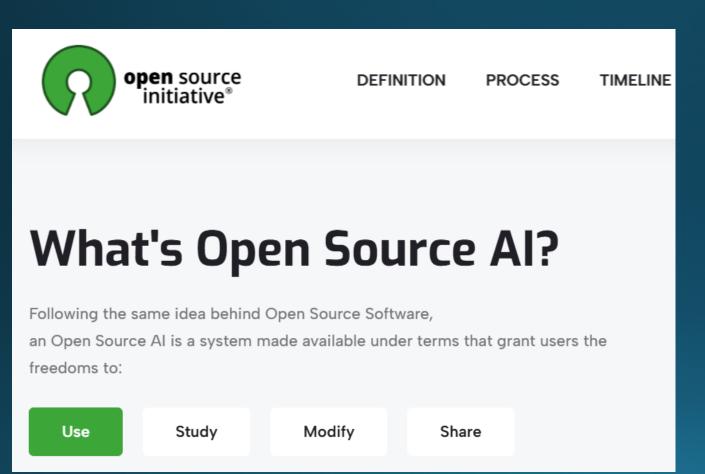


Combat Openwashing

Companies are calling AI systems "open source" even though their licenses contain restrictions that go against the accepted principles and freedoms of open source.

Source: https://opensource.org/ai

More in details



- Use the system for any purpose and without having to ask for permission
- Study how the system works and understand how its results were created
- Modify the system for any purpose, including to change its output
- Share the system for others to use with or without modifications, for any purpose

Source: https://opensource.org/ai

...but let's be pragmatic

Threat model: I am an engineer, and I want to use AI assistants without giving ANY data to anyone. I should be able to understand more or less how it works, to assess and predict the results.

YOUR MILEAGE MAY VARY



Let me create a voice profile of you, for your convenience of course!



Let me screenshot and analyse everything you do with your PC, for your convenience of course!



Give me access to all your app, for your convenience of course!



Let me shadow you every second of every day, for your convenience of course!

Why do I need an AI in the first place?

- Write emails and all sort of effective communication in non-native languages
- Very effective anti-spam filters
- Social media personalised algorithms
- Automation agents / Web scraping
- Occasional coding
- Pictures for meme and visual communication
- Pictures for fun
- Conversational chatbots
- Generation of Role play stories and games
- Image descriptions
- Etc.

For daily tasks you do not necessarily need commercial products!

We can run an inference server on consumer HW...

...due to the magic of model quantisation (GGUF format)

- <u>Llama.cpp</u> compiled from source (from Rpi5 to HP proliant)
- Ollama (isolated in a container please!)
- VLLM or TGI (for production workloads)
- ThunderAl add-on for Thunderbird
- <u>LocalWriter</u> extension for LibreOffice Writer
- ComfyUI for image generation (also video and audio, but limited)
- <u>LMStudio</u> for easy prototyping
- <u>OpenWebUI</u>
- and, of course, code written in your preferred language















...and it is not that expensive!

My home set-up:

- 17 6700 (from 2015!)
- 32 Gb RAM
- Nvidia RTX 3060 12Gb VRAM (300€)
- to be ideal, I would need to add a second RTX 3060



But... but... what about **⋐Mac**?

We are talking about Open-Source, aren't we?

And... and... what about scaling up for a small or medium sized business?

Dual Nvidia H100 ordered, I will let you know

Conclusions

Eric Schmidt warns west to focus on opensource AI in competition with China

Former Google chief's caution comes following Chinese start-up DeepSeek's breakthrough



Eric Schmidt: 'Europe's got to get its act together. The application layer is profoundly powerful, and it will make your Europe more efficient' © Blondet Eliot/ABACA/Reuters Connect

Melissa Heikkilä in Paris 5 HOURS AGO





Former Google chief Eric Schmidt has warned that western countries need to focus on building open-source artificial intelligence models or risk losing out to China in the global race to develop the cutting-edge technology.

"If we don't do something about that, China will ultimately become the opensource leader, and the rest of the world will become closed-source".

The billionaire said a failure to invest in open-source technologies would prevent scientific discovery from happening in western universities, which might not be able to afford costly closed models.

Source: Financial Times 12/2/2025

Eric Schmidt warns west to focus on open-source Al in competition with China