

OPEN SOURCE AI DEFINITION

Online public townhall

Feb 9, 2024

● Community agreements

- **One Mic, One Speaker** -- Please allow one person to speak at a time.
- **Take Space, Make Space** -- If you tend to talk more, we invite you to make space for others to share. If you tend not to share, we invite you to speak up.
- **Kindness** -- This work is hard, but we don't have to be. Gentleness and curiosity help. Those who use insults or hate speech will need to leave the meeting.
- **Forward Motion** -- We advance by focusing on what is possible in the moment and doing it. Obstacles are marked for later discussion, not used to stop the process. If we hit a boulder, we note it on the map and keep walking. We'll come back and unearth it later on.
- **Solution-Seeking** -- This work is so complex that focusing on what won't work will stop it. Suggesting new ideas, options, and proposals is vulnerable, but crucial. All of us are needed to make this work.
- **Anything else?**

A large, diverse audience is seated in a dark theater, filling the frame from the foreground to the back. The audience members are mostly men, some looking towards the stage, others looking down at their phones or notebooks. The theater has a curved, tiered seating arrangement. The stage area is dark, with some lights visible on the ceiling and sides. The overall atmosphere is that of a professional conference or event.

The objective for 2024 Open Source AI Definition version 1.0

Definition of AI system

Preamble

Out of scope issues

4 freedoms

License checklist

version 0.0.3

[Leave comments for this text](#)

[About](#) [Programs](#) [Licenses](#) [Open Source](#)

stating the intentions of this document; the Definition of Open Source AI itself; and a checklist to evaluate licenses.
We follow the [definition of AI adopted by UNESCO](#):

An AI system is a machine-based system that can, for a given set of human-defined objectives, make predictions or decisions influencing real or virtual environments. AI systems are designed to operate with varying levels of autonomy.

Preamble

Why we need Open Source Artificial Intelligence (AI)

Open Source has demonstrated that massive benefits accrue to everyone when you remove the barriers to learning, using, sharing and improving software systems. These benefits are the result of using licenses that adhere to the Open Source Definition. The benefits can be distilled to autonomy, transparency, and collaborative improvement.

Everyone needs these benefits in AI. We need essential freedoms to enable users to build and deploy AI systems that are reliable and transparent.

How we can get the benefits of Open Source AI

A precondition for a system to be Open Source software is that developers must have unrestricted access to the "preferred form to make modifications to the work".

For AI systems, the preferred form to make modifications to the work depends on the specific kind of AI.

[Provide an example, based on machine learning?]

Out of scope issues

The Open Source AI Definition doesn't say how to develop and deploy an AI system that is ethical or responsible, although it doesn't prevent it. What makes an AI system ethical or responsible is a separate discussion.

What is Open Source AI

To be Open Source, an AI system needs to make its components available under licenses that individually grant the freedoms to:

- **Study** how the system works and inspect its components.
- **Use** the system for any purpose and without having to ask for permission.
- **Modify** the system to change its recommendations, predictions or decisions to adapt to your needs.
- **Share** the system with or without modifications, for any purpose.

[Provide an example, based on machine learning?]

Checklist to evaluate licenses

TODO

[Leave comments for this text](#)

What is Open Source AI

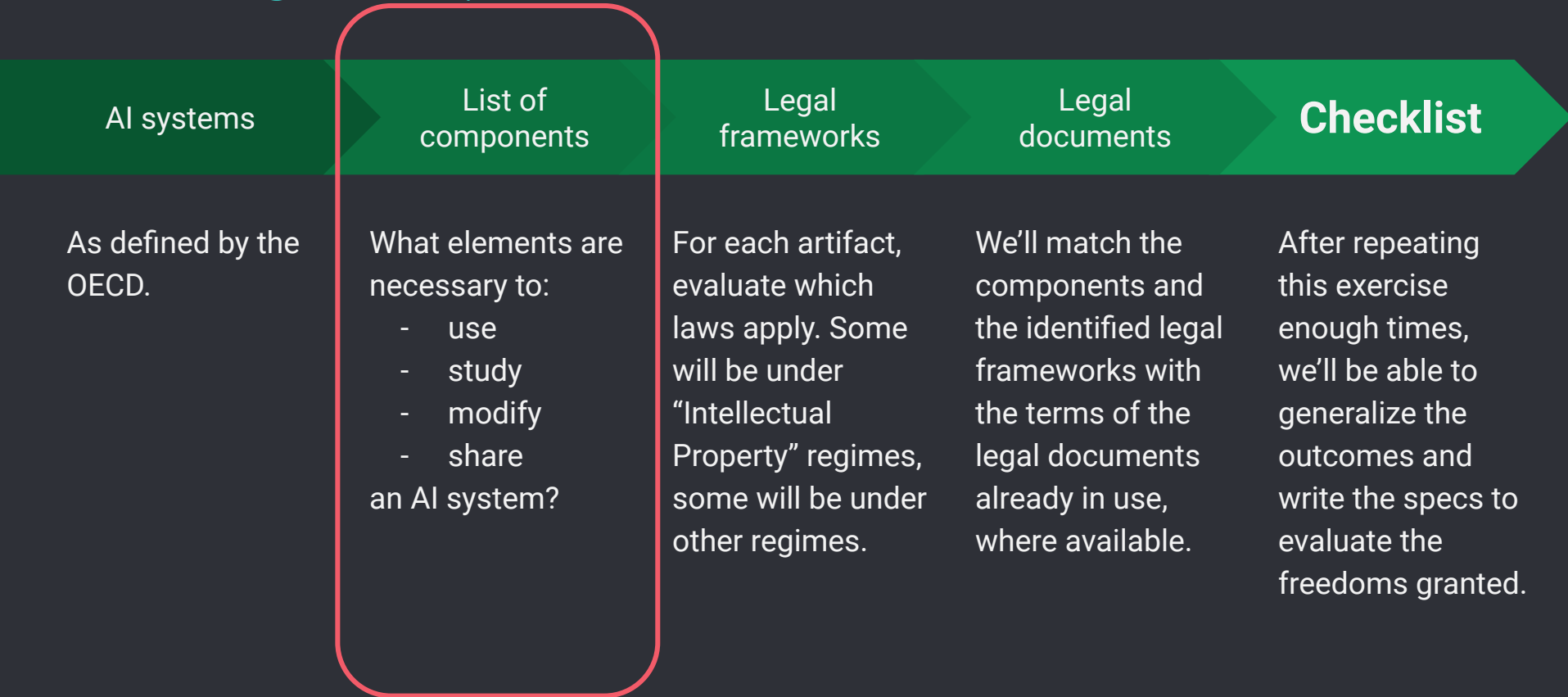
To be Open Source, an AI system needs to be available under legal terms that grant the freedoms to:

- **Use** the system for any purpose and without having to ask for permission.
- **Study** how the system works and inspect its components.
- **Modify** the system to change its recommendations, predictions or decisions to adapt to your needs.
- **Share** the system with or without modifications, for any purpose.



What is the **preferred form to make modifications** to an AI system?

Getting the specifications





Report from the working groups

Analyzing Llama2 and Pythia

● Participants (Llama2 WG)

- ✓ **Stefano Maffulli** -- Open Source Initiative (convener)
- ✓ **Mer Joyce** -- Do Big Good (facilitator)
- ✓ **Bastien Guerry** -- DINUM, French public administration
- ✓ **Ezequiel Lanza** -- Intel
- ✓ **Roman Shaposhnik** -- Apache Software Foundation
- ✓ **Davide Testuggine** -- Meta
- ✓ **Jonathan Torres** -- Meta
- **Stefano Zacchioli** -- Polytechnic Institute of Paris

✓ = attended

All members participating in a personal capacity.

● Participants (Pythia wg)

- **Stefano Maffulli** -- Open Source Initiative (convener)
- **Seo-Young Isabelle Hwang** (Samsung)
- **Cailean Osborne** (Researcher, Linux Foundation)
- **Stella Biderman** (Eleuther AI)
- **Justin Colannino** (Microsoft)
- **Aviya Skowron** (Eleuther AI)

All members participating in a personal capacity.

● Purpose

- **Process** -- OSI has been convening a global conversation to find the definition of open source AI for almost two years.
- **Track** -- The 2024 objective scope for Track 1: System Testing is to discover what components need to be available in each AI system for the whole system to be studied, used, modified, and shared. We plan to complete this track at the latest by May.
- **Working group report** -- objective is to talk through initial points of difference on what components of Llama2, Pythia would need to be open for the whole AI system to be studied, used, modified, and shared.

● Framing

- **Document** – We'll review the [components table](#) in the Llama 2 specs doc and decide which exist in that AI system, with a focus on resolving disagreement.
- **Expectations** – We'll see how much of the table we get through. (Insights on tempo and pace will be among the learnings from this meeting.)
- **Anything else?** – Are there any other expectations or framings we should put in place before we begin working through the components table?
- **Deadline** - Feb 16 publish Llama2 and Pythia

● Analysis of LLaMA2

Code All code used to parse and process data, including:	Required to Use?	Required to Study?	Required to Modify?	Required to Share?
Data preprocessing code		SZ	SZ EL	
Training code		SZ	SZ	
Test code				
Code used to perform inference for benchmark tests				
Validation code			SZ	
Inference code	SM EL DT SM JT SZ		SZ	SZ
Evaluation code				
Other libraries or code artifacts that are part of the system, such as tokenizers and hyperparameter search code, if used.	BG,EL, SM, SZ	SZ	SZ	SZ

● Analysis of LLaMA2

Data All data sets, including:	Required to Use?	Required to Study?	Required to Modify?	Required to Share?
Training data sets		SZ	SZ	
Testing data sets			SZ	
Validation data sets			SZ	
Benchmarking data sets				
Data card				
Evaluation data				
Evaluation metrics and results				
All other data documentation		SZ	SZ	

● Analysis of LLaMA2

Model All model elements, including:	Required to Use?	Required to Study?	Required to Modify?	Required to Share?
Model architecture		SZ	SZ	
Model parameters	SM, SZ, JT	SZ	SZ	SZ
Model card	EL			
Sample model outputs				
Other Any other documentation or tools produced or used, including:	Required to Use?	Required to Study?	Required to Modify?	Required to Share?
Research paper				
Usage documentation			SZ	
Technical report				
Supporting tools				

● Analysis of Pythia

Code All code used to parse and process data, including:	Required to Use?	Required to Study?	Required to Modify?	Required to Share?
Data preprocessing code	SH	SB SH CO	SB SH CO	SH
Training code	SH	SB SH CO	SB SH CO	SH
Test code	SH	SB SH CO		SH
Code used to perform inference for benchmark tests		SB SH CO		
Validation code		SB SH CO		
Inference code	SB SH	SH		SH
Evaluation code		SB SH CO		
Other libraries or code artifacts that are part of the system, such as tokenizers and hyperparameter search code, if used.	SB CO	SB SH CO	SB CO	

● Analysis of Pythia

Data All data sets, including:	Required to Use?	Required to Study?	Required to Modify?	Required to Share?
Training data sets	SH	SB SH CO		
Testing data sets	SH	SB SH CO		
Validation data sets		SB SH CO		
Benchmarking data sets		SB SH CO		
Data card		SB SH ?		
Evaluation data		SB SH CO		
Evaluation metrics and results		SB SH CO		
All other data documentation		SB SH CO		

● Analysis of Pythia

Model All model elements, including:	Required to Use?	Required to Study?	Required to Modify?	Required to Share?
Model architecture	SB SH CO	SB SH CO	SB SH CO	SB SH CO
Model parameters	SB SH CO	SB SH CO	SB SH CO	SB SH CO
Model card				
Sample model outputs		SH		
Other Any other documentation or tools produced or used, including:				
Research paper				
Usage documentation				
Technical report				
Supporting tools	SB	SB	SB	SB

- Important questions on the forums

- - The question of data
 - Is the OECD definition too broad?
 - Does the “Share” verb need clarification?



Next steps



Recruiting volunteers

- Review and validate the list of components
- Analyze other AI systems (BLOOM, OpenCV ...)

2024 timeline

System testing work stream

Stakeholder consultation work stream

Release schedule

February	March	April	May	June October
Call For Volunteers + Activity Feedback and Revision	Virtual System Review Meetings Begin	Virtual System Review Meetings Continue	Virtual System Review Meetings END	Feedback Informs Content of OSI In-Person Stakeholder Meeting	Monthly Virtual Meetings
Bi-Weekly Virtual Public Townhalls	Bi-Weekly Virtual Public Townhalls	Bi-Weekly Virtual Public Townhalls	Bi-Weekly Virtual Public Townhalls	Townhall + OSI In-Person Stakeholder Meeting (date + place TBD)	Release version 1.0
Draft 0.0.5	Draft 0.0.6	Draft 0.0.7	Draft 0.0.8	RC1	v. 1.0

● Criteria for RC1 and v. 1.0









RC1

- Expected outcome of in-person meeting end May/early June!
- The draft is completed in all its parts
- The draft is supported by at least 2 representatives for each of the 6 stakeholder groups

version 1

- Expected outcome of in-person and online meetings through the summer/early autumn
- The draft is endorsed by at least 5 reps for each of the stakeholder groups
- Announced in late October

Help us find stakeholders

System Creator	License Creator	Regulator	Licensee	End User	Subject
Makes AI system and/or component that will be studied, used, modified, or shared through an open source license (e.g., ML researcher in academia or industry)	Writes or edits the open source license to be applied to the AI system or component; includes compliance (e.g., IP lawyer)	Writes or edits rules governing licenses and systems (e.g. government policy-maker)	Seeks to study, use modify, or share an open source AI system (e.g. AI engineer, health researcher, education researcher)	Consumes a system output, but does not seek to study, use, modify, or share the system (e.g., student using a chatbot to write a report, artist creating an image)	Affected upstream or downstream by a system output without interacting with it intentionally; includes advocates for this group (e.g. people with loan denied, or content creators)
					
Enough to start	Enough to start	Leads to US, EU, Singapore, no commitment yet	Enough to start	Which org is squarely in this space?	ACLU, Algorithmic Justice League



It doesn't end with v. 1.0

We'll need to define rules for maintenance and review of the Definition

OSI's immediate next steps

- more publicity to the process
 - ~~public discussion forum~~ -
<https://discuss.opensource.org>
 - bi-weekly townhalls
 - more opportunities to volunteer
- update project landing page
- reach out to more stakeholders
- raise funds for 2024 meetings
- setup the board for review and approval of v. 1.0

Join the conversation

- Public forum
- Join as OSI member
 - Free or full
 - SSO with other OSI websites

open source initiative

Log in

Topics

More

Categories

Open Source AI

All categories

Deep Dive

This is where we're discussing the "Open Source AI Definition". This topic is part of OSI's [Deep Dive: AI](#), the global multi-stakeholder effort to define *Open Source AI*. OSI is bringing together different organizations and individuals to collaboratively write a new document.

Open Source AI all tags Latest Top

Topic	Replies	Views	Activity
* Deep Dive: Artificial Intelligence This is where we're discussing the "Open Source AI Definition". This topic is part of OSI's Deep Dive: AI, the global multi-stakeholder effort to define Open Source AI. OSI is bringing together different organizations an... read more	0	9	2d
Open Source AI Definition draft v. 0.0.4	0	6	6d
Open Source AI Definition Town Hall - Jan 26, 2024	0	6	6d
Open Source AI Definition Town Hall - Jan 12, 2024	1	4	6d

There are no more Open Source AI topics.

Draft v. 0.0.5 of the Open Source AI Definition

Open to public comments

<https://opensource.org/deepdive/drafts>



Closing

● Debrief

- **Reflection** – How did that discussion go? Were we able to address areas of disagreement in a meaningful way? If so, how? If not, why not?
- **Adaptation** – How might we change the structure of this meeting? How can we improve our review method for other AI systems?
- **Next Steps** – How to continue to resolve disagreements? Another synchronous meeting? Asynchronous commenting or other method? How would you personally like to be involved?



Thank you

We realize this is difficult work and we appreciate your help and openness, both in analyzing this system and improving the definitional process.