OPEN SOURCE AI DEFINITION

Online public townhall

September 6, 2024

last updated: September 4, 2024 (MJ)



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?

Open Source Al Definition **New Version 0.0.9** Released August 22, 2024











The preferred form of making modifications for a machine-learning Open Source AI System must include:

Open Weights

Model weights and parameters



Open Code

Source code used to train and run the system

Data Information

The dataset or detailed information about the data used to train the system















The preferred form of making modifications for a machine-learning Open Source AI System must include:

Weights

The model weights and parameters, made available under OSI-approved terms

Examples: checkpoints from key intermediate stages of training as well as the final optimizer state













The preferred form of making modifications for a machine-learning Open Source AI System must include:

Code

The source code used to train and run the system, made available with OSI-approved licenses

Examples: code used for pre-processing data, training, validation and testing, supporting libraries like tokenizers and hyperparameters search code, inference code, and model architecture.













The preferred form of making modifications for a machine-learning Open Source AI System must include:

Data Information

Sufficiently detailed information about the data used to train the system, so that a skilled person can recreate a substantially equivalent system using the same or similar data. Data information shall be made available with licenses that comply with the Open Source

Examples: training methodologies and techniques, training data sets used, information about the provenance of those data sets, their scope and characteristics, how the data was obtained and selected, the labeling procedures and data cleaning methodologies.

Training Data in the OSAID











OSI affirms the benefits of full access to training data while acknowledging it is not always possible for reasons of law, privacy norms, technical feasibility, and cultural practice.

- Training data is valuable to study AI systems: to understand the biases that have been learned, which can impact system behavior. But training data is not part of the preferred form for making modifications to an existing AI system
- Data can be hard to share. Laws that permit training on data often **limit the resharing** of that same data to protect copyright or other interests.
- Privacy rules also give a person the rightful ability to control their most sensitive information, such as decisions about their health.
- Similarly, much of the world's **Indigenous knowledge** is protected through mechanisms that are not compatible with later-developed frameworks for rights exclusivity and sharing.
- Open training data (data that can be reshared) provides the best way to enable users to study the system, along with the preferred form of making modifications.
- Public training data (data others can inspect as long as it remains available) also enables users to study the work, along with the preferred form.

OSAID Approval Criteria









OSI Board requires a definition that is:

Supported by diverse stakeholders

The definition needs to have approval by end users, developers, deployers and subjects of AI, globally.

Provides real-life examples

The definition must include relevant examples of Al systems that comply with it at the time of approval, so cannot have an empty set.

Ready by October 2024

A usable version of the definition needs to be ready for approval by the board at the October board meeting.



Approved June 21, 2024

Relevant comments

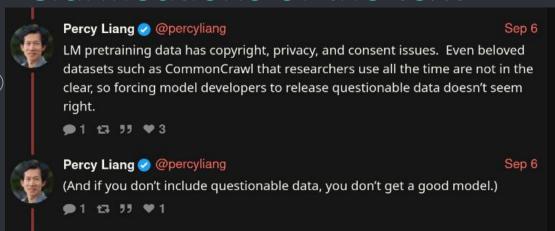
Summary of the discussions on the forum and on hackmd

Clarifications of the text

- Randall:
 - Rename data as "source data"
 - Be explicit that public data needs enumeration
 - Be explicit that one can require downstream users to open their data if they fine tune on your model

https://discuss.opensource.org/t/welco me-diverse-approaches-to-training-data -within-a-unified-open-source-ai-definiti on/531

Clarifications of the text



From just the data, it is hard to understand *why* certain tokens are included or excluded. For this, you really need the code for the *full* data processing pipeline.

A open-source definition proposal: the following should be released:

- Code for entire procedure
- Any part of the executed versions (data, weights) without copyright/privacy concerns
- Pointers to all the raw data (CommonCrawl, torrent link, etc.

Hardware considerations

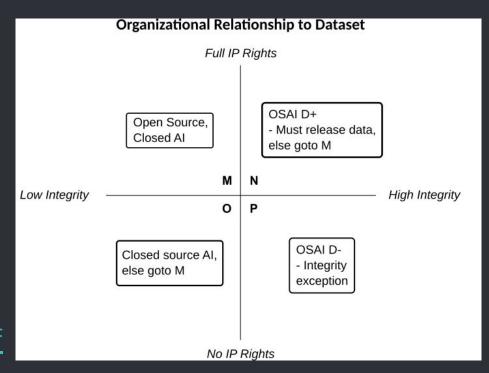
Mariana Taglio and Allison Randall mention hardware. "include the detailed technical aspects of model training, such as hardware specifications, training time and carbon footprint (if available)" https://discuss.opensource.org/t/sha re-your-thoughts-about-draft-v0-0-9

Map dataset's right to distribute

Wade:

 a framework to describe the commitment to releasing data information, or the dataset when legally possible

https://discuss.opensourc e.org/t/proposal-to-handl e-data-openness-in-the-o pen-source-ai-definition-rf c/561



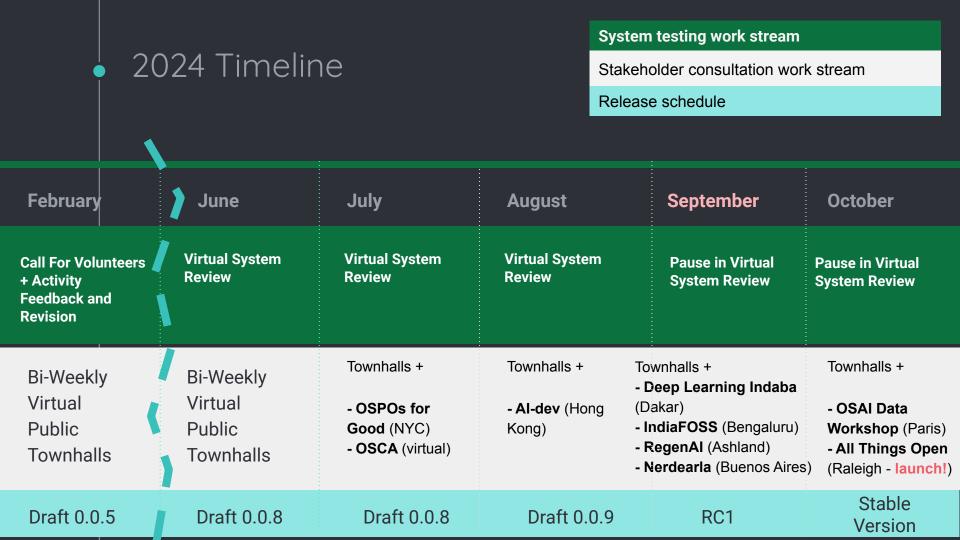
Open Source Al Definition What's Next?

September - October 2024

- Resolve comments, release RC1
- Launch stable version at All Things Opens

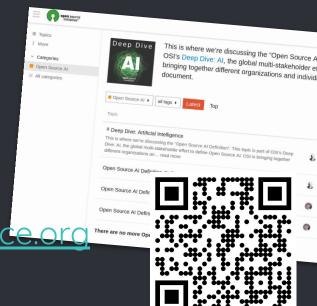
Endorse the OSAID!

- In preparation for the finalization of RC1 at the end of this month, we are seeking both individual and organizational endorsements of the OSAID.
- "Endorsement" means your name and organizational affiliation will be appended to a press release announcing RC1.
- If you or your organization are interested in endorsing the OSAID, email me or Mer at Mer@dobiggood.com



How to Participate :)

- Endorse the OSAID!
 - Email Stefano or Mer
- Public forum: <u>discuss.opensource.orc</u>
- Become an OSI member
 - Free or or full
 - SSO with other OSI websites
- Biweekly virtual townhalls... like this one!



Q & A

Thank you

We realize this is difficult work and we appreciate your help and openness in improving the definition.