

# Recommendations to the EU Parliament regarding the EU AI Act

## Abstract

Open-source AI models offer enhanced security, explainability, and robustness due to their transparency and the vast community oversight. They promote environmental sustainability by minimizing redundant training and serve as a catalyst for innovation, especially for small and mid-sized enterprises. To leverage these multifaceted benefits and uphold European sovereignty in AI, it is recommended that the EU Parliament incentivizes open-source releases of AI models.

## To the Honorable Members of the EU Parliament,

Open-source AI models, including foundational models, represent a paradigm that carries significant benefits for the industry, research, and society at large. In contrast, the alternative of closed-source does not provide a lasting solution to challenges entailed by the highly dynamic development of AI with its fast reimplementation of existing approaches. This memo aims to present the core arguments in favor of open-source models and to recommend appropriate regulatory positioning.

1. **Scientific and technological reproducibility.** A crucial point is the aspect of scientific reproducibility and validation provided by open-source foundation models and corresponding open datasets. Investigations and experiments on open foundation models are reproducible and can be executed by a broad research community to validate any claims put forward about their properties and function. This reproducibility - not given in closed-source counterparts - secures scientific standards for treatment of foundation models, which is vitally important for transparent scientific and technological progress.
2. **Transparency and Security:** Open-source AI models, by virtue of their accessibility and transparency, are inherently safer than closed-source counterparts. The collaborative nature of open-source means a larger community can detect and fix vulnerabilities, thereby enhancing the overall security and robustness of the model. Moreover, the well-established processes in the open-source community, as exemplified by the robust and secure Linux operating system, ensure stringent oversight and continuous improvement. Closed-source models, on the other hand, have a limited scope of oversight, potentially increasing their vulnerability.
3. **Sustainability and Environmental Impact:** Open-source models promote environmental sustainability by preventing redundant training runs. Reproducing similar capabilities across various closed-source models consumes vast computational and energy resources. By making foundational models open-source, we avoid this duplication of effort, thereby conserving computational resources and energy.

4. **Innovation and Access:** Open-source foundational models act as a springboard for innovation, especially for small and mid-sized enterprises. Fine-tuning these models, a more affordable process than training from scratch, enables smaller entities to drive innovation. Restricting access to datasets and models can deter innovation and may prompt researchers and organizations to migrate out of Europe.
5. **European Sovereignty and Global Challenges:** An environment conducive to AI research with open-source AI models and their development is crucial for maintaining European sovereignty in AI. Open-source AI research has the potential to address global challenges, from healthcare to climate change.
6. **Recommendation for Incentivization:** To strike a balance between commercial interests and societal benefits, we recommend incentivizing firms to release their foundational models as open-source while allowing them to retain proprietary rights over fine-tuned, industry-specific versions. This ensures broader access to base models without compromising commercial competitiveness. Leveraging proven strategies such as ["open-core"](#) and ["freemium"](#) models could offer a practical roadmap. Furthermore, considering that many foundational models are built using public data, there stands a moral imperative to keep them open-source.

In light of the aforementioned benefits of open-source AI models, particularly in terms of security, sustainability, and fostering innovation, it is recommended to adopt a regulatory approach that distinctly favors open-source (foundation) models, over closed-source models. It is imperative that regulation focuses primarily on the actual applications built atop these models rather than the open-source (foundation) models themselves. This strategy not only spearheads technological advancement in Europe but also charts a course for ethical and sustainable growth, promoting a development paradigm that is both innovative and responsible.

In general, we think that it is also very important to focus on regulating the usage of AI technology, and not on the regulation of AI Algorithms themselves.

Yours sincerely,

LAION e.V.

## Supporters

Name	Description
<p>Board of the European Laboratory for Learning and Intelligent Systems (ELLIS)</p> <p>Serge Belongie, Nicolò Cesa-Bianchi, Florence d'Alché-Buc, Nada Lavrac, Neil D. Lawrence, Nuria Oliver, Bernhard Schölkopf, Josef Sivic, Sepp Hochreiter</p>	<a href="https://ellis.eu">Board   European Lab for Learning &amp; Intelligent Systems (ellis.eu)</a>
Yann André LeCun	Chief AI Scientist at Facebook & Silver Professor at the Courant Institute, New York University
Jürgen Schmidhuber	Prof. Jürgen Schmidhuber : Scientific Director of the Swiss AI Lab IDSIA (USI & SUPSI), Co-Founder & Chief Scientist of NNAISENSE, Father of Modern AI
Kristian Kersting	Full Professor at Technical University of Darmstadt, Co-Director, Hessian Center for AI (hessian.AI) and member of the German Center for Artificial Intelligence (DFKI)
Björn Ommer	Full professor and head of the Computer Vision & Learning Group at the Ludwig-Maximilians-University of Munich
Hilde Kuehne	Professor, Institute for Computer Science II, Head of Multimodal Learning, University of Bonn
Mira Mezini	Professor of Computer Science at Technical University of Darmstadt, Co-Director of Hessian Center for AI (hessian.AI)
Patrick Schramowski	Senior Researcher at the German Center for Artificial Intelligence (DFKI) and Hessian Center for AI (hessian.AI), Neurips 2022 Outstanding Paper Award
Jenia Jitsev	Senior Researcher and Lab Lead at Juelich Supercomputing Center, Research Center Juelich. Scientific Lead and Co-Founder at LAION; Member of European Laboratory for Learning and Intelligent Systems (ELLIS)

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Mark Schutera	PhD Student Karlsruhe Institute of Technology within Unsupervised Deep Learning for Cognitive Perception Systems
Andreas Hochlehnert	PhD Student, University of Tübingen, International Max-Planck Research School for Intelligent Systems (IMPRS-IS)
Irina Rish	Full Professor at the Université de Montréal, a core member of Mila - Quebec AI Institute. Canada Excellence Research Chair (CERC) in Autonomous AI and CIFAR Chair. PI on a collaborative INCITE project on the Summit supercomputer at OLCF (supported by the U.S. DoE, Office of Science ), aiming to build open-source large-scale language and multimodal models (e.g., RedPajama-INCITE was trained as a part of this project).
Huu Nguyen	Former big-law partner, CEO and co-founder of Ontocord.AI, LAION volunteer, co-author of Data Governance in the Age of Large-Scale Data-Driven Language Technology, FAccT '22, and co-author of resolution 112 of the ABA on encouraging lawyers to understand the risks and benefits of AI.
Hessie Jones	Writer, Forbes, Data Privacy, Ethical AI Practitioner, Advocating for Human-centred AI and Ethical Distribution of AI Systems, BOA Women in AI Ethics, Co-founder MyData Canada, Cofounding Member Personally Identifiable Information Standards Architecture (PIISA); former COO Beacon Trust Network, BOD Technology for Good Canada
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