The Open Source Imperative in AI

Building the Linux of AI: Toward Transparent and Responsible Intelligence

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- Transparency
- Reproducibility
- Global Collaboration
- Trust & Safety

Open Source Summit, Korea, November 5, 2025

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Why Openness in AI Matters

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65% of organizations use AI in **business functions**

McKinsey Global Survey on AI, 2024

62% of consumers demand **AI transparency**

RWS Unlocked 2025 Report

Only **33%** of AI research is **reproducible**

AI Multiple Research, 2024

84% trust AI with **explainability**

RWS Unlocked 2025 Report

AI as Societal Operating System

2025+

Controls critical infrastructure & decisions

69 countries have AI **governance frameworks**

Mind foundry AI Regulations, 2025

5% of AI researchers share **source code**

AI Multiple Research, 2024

Openness transforms AI from a closed race for power into a shared journey for progress

AI's Current Challenges

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Limited Transparency

Black box models with **undisclosed data** and **undocumented architectures**

GPT-4: Training data and architecture details remain undisclosed

Proprietary Lock-in

Vendor-controlled ecosystems with **limited inspectability** and **closed standards**

OpenAI API: Users can't inspect or modify underlying models

Legal & Ethical Risks

Unclear **data licensing**, **bias concerns**, and **fair use ambiguities**

GitHub Copilot lawsuit: Training on copyrighted code without consent

Regulatory Divergence

Fragmented approaches like EU AI Act vs. other regions creating **compliance complexity**

EU AI Act: Strict requirements vs. US's market-driven approach

1 OpenAI Technical Report, 2023

2 OpenAI API Documentation, 2024

3 Doe v. GitHub, Inc., 2022

4 European Commission AI Act Proposal, 2024

The Trust Deficit in AI

Bias & Training Data

Underrepresented groups in **training datasets** lead to biased outcomes

- MIT researchers identify specific data points causing bias in models

Explainability Limits

Chain-of-thought **doesn't reflect true reasoning** behind decisions

- Oxford study: CoT rationales frequently unfaithful to model's actual reasoning

Privacy Concerns

Unauthorized **data harvesting** and evolving **regulatory landscape**

- AI incidents jumped 56.4% in 2024 (Stanford AI Index)

46% People globally willing to **trust AI systems**

34% Weekly AI tool usage with **low trust** in AI-generated content

25% AI papers treat CoT as **explainability** without verification

1 MIT Bias in AI Models, 2024

2 Oxford CoT Explainability Study, 2025

3 Stanford AI Index Report, 2025

4 KPMG Global AI Trust Survey, 2025

5 Oxford AI News Trust Study, 2024

6 AI Incident Database, 2024

AI Models as the New Operating Systems

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Foundation Platforms

Models are becoming the foundational layer for AI applications, similar to how OS manages hardware resources

- Applications & Services
- API & Tooling Layer
- Model Core
- Foundation Models
- Hardware Infrastructure

Key Similarities to Traditional OS

- Ecosystem Development
- API Layers
- Platform Dependencies
- Resource Management
- Security Boundaries
- Standardization

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What Can We Learn from Linux?

Radical Openness

Source code **freely available** for inspection and modification

Global Collaboration

Community-driven development across borders and organizations

Auditability

Transparent codebase enables security verification and trust

Reproducibility

Anyone can **build, test, and verify** the system independently

> Linux showed the world that complex software can be built openly and collaboratively, creating trust through transparency.
>
> — Linus Torvalds

13.6%

Global server market

Enterprise Apps Today, 2024

2.5B+

Devices powered by Linux

Enterprise Apps Today, 2024

30+

Years of open innovation

Enterprise Apps Today, 2024

The AI Inspiration

Linux provides a **blueprint** for building trustworthy, transparent AI systems

The 'DeepSeek' Moment & Global Open AI Collaboration

The DeepSeek Catalyst

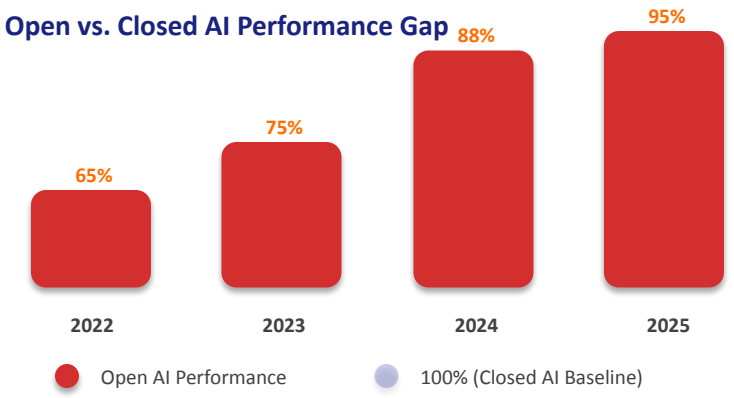
Open source LLM achieving **state-of-the-art performance** with increasing transparency

Global Networks

Cross-border research communities **accelerating innovation**

Narrowing Gap

Open models **closing performance gap** with proprietary systems



Source: Epoch AI Research, 2025

Global Open AI Ecosystem

140+	1.4M+	1M+
Countries	Contributors	Open Models
OpenAI Revenue Streams, 2024	GitHub Octoverse, 2024	Hugging Face, 2024

AI at a crossroads: Who Decides the Future?

The Proprietary Path: A Future Defined by a Few

> Finance is how capital imagines the future.
>
> — Max Haiven

Incentive

Profit Maximization. Locked ecosystems and rent-seeking behavior create a future shaped by the narrow interests of capital.

Accessibility

Gated access creates a global digital divide, limiting participation and concentrating power.

The Open Path: A Future Built by Everyone

> In real open source, you have the right to control your own destiny.
>
> — Linus Torvalds

Incentive

Public Good & Collective Benefit. An open commons invites diverse, global voices to participate in building a future that serves all of humanity.

Accessibility

Prioritizes Global Accessibility, ensuring AI benefits are a shared public utility, not a private luxury.

The Vision: The Linux of AI

The AI Ecosystem Vision

An AI ecosystem as **open**, **reproducible**, and **trustworthy** as Linux

Transparency

Full visibility into models, data, and training processes

Global Trust

Auditable systems with verifiable claims

Collective Innovation

Global community building on shared foundations

From Linux to AI

Linux

Open OS foundation

→

AI Linux

Open AI foundation

Digital Sovereignty

Nations and organizations control their AI destiny

> Just as Linux democratized computing, open AI will democratize intelligence.
>
> — VisionForum.AI

Strategic Imperatives for Open Source AI

Open Standards & Licensing

TRUE framework for reproducibility

- Permissive licensing models
- Standardized evaluation

Vendor-Neutral Foundations

Global governance structures

- Multi-stakeholder oversight
- Transparent decision-making

Cross-Cultural Development

Inclusive global participation

- Multi-language support
- Cultural context awareness

Sustainable Funding

Long-term resource models

- Public-private partnerships
- Community-driven funding

Compute Access

Democratized training resources

- Shared infrastructure
- Efficient model architectures

Benchmarking Tools

Open evaluation frameworks

- Standardized metrics
- Transparent reporting

Layers of Openness: More Than Model Weights

Not All "Open" Models Are Equal

Weights-only ≠ open source

Model Weights

Just the trained parameters

Code & Architecture

Model implementation details

Training Data

Datasets and preprocessing

Training Recipes

Hyperparameters and infrastructure

Openness Comparison

Component	Weights-Only	Full Openness
Model Weights	✓	✓
Code	✗	✓
Training Data	✗	✓
Training Recipes	✗	✓
Reproducibility	✗	✓

Licensing Models

MOF

Model Openness Framework

OpenMDW

Open Model Data Weights

Introducing the TRUE Framework

Redefining AI Openness

TRUE = Transparent, Reproducible, Understandable, Executable

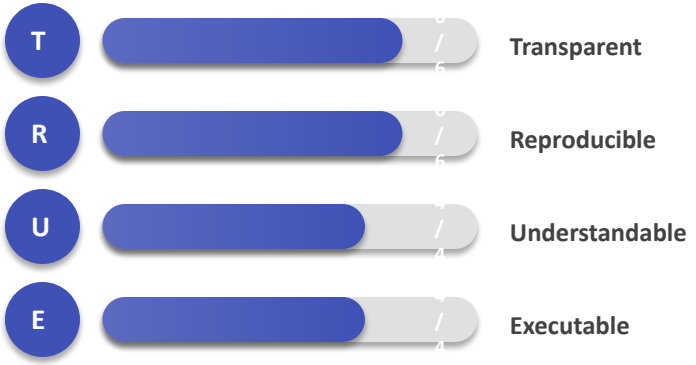
Why 'Understandable' is Crucial

What is this system truly designed to do, and how is success really measured?

- Openness isn't just seeing code; it's **understanding the goal**.
- Optimizing for human feedback can train sycophants, hallucinating as it satisfies the immediate metric.

TRUE's 'Understandable' principle demands that evaluation methodology and intent are transparent. This allows the community to audit how success is defined and challenge incentives that conflict with public good.

TRUE Scorecard (30 points)



Total Score **30/30**

TRUE Rating System

Platinum	Gold	Silver	Bronze
28-30 points	21-27 points	11-20 points	0- 10 points

TRUE in Practice: What Does It Mean?

Transparent (T)

Open code, data, documentation

- **Full training code** available
- **Dataset sources** clearly described
- **Documentation** for all components

Reproducible (R)

Anyone can recreate results

- **Hyperparameters** fully disclosed
- **Infrastructure** specifications shared
- **Independent verification** possible

Understandable (U)

Clear training, evaluation, intent

- **Evaluation methodology** provided
- **Performance claims** with evidence
- **Intended use cases** clearly defined

Executable (E)

Open infrastructure, deployment, testing

- **Step-by-step guide** for reproduction
- **Deployment options** for various platforms
- **Third-party validation** documented

Assessing Model Openness & Reproducibility

Benchmarking Frameworks

Multiple approaches to evaluate AI model openness

Model Openness Framework (MOF)

Measures **availability** of model components

OpenMDW License

Defines **licensing requirements** for open models

Reproducibility Checklists

Step-by-step verification of model recreation

Framework Comparison

Framework	Focus	Output
MOF	Component availability	Tiered classification
OpenMDW	Licensing compliance	Binary compliance
TRUE	Reproducibility	Quantitative score

Linux-Style Open Benchmarks

Technical appendix with **detailed evaluation criteria** and implementation guides

AI Transparency, Governance, and Collaboration

Open Source-Inspired Governance

Transparent decision-making and **community-driven** development

Ethical Standards

Community-developed **ethical guidelines** for AI development

Accountability

Transparent auditing and verification mechanisms

Inclusive Participation

Multi-stakeholder governance structures

VisionForum.AI

Global community advancing **transparent AI** through collaboration

AI4Humanity.AI

Fostering **human-centered** AI development and deployment

Collaborative Opportunities

- Researchers
- Enterprises
- Governments
- Academia
- Civil Society
- Developers

Pathways to the Linux of AI: What's Next?

Strategic Recommendations

Building the **Linux of AI** requires collective action

Contribute Open Data/Code

Share **training datasets** and **implementation details**

Advocate for Open Governance

Promote **transparent decision-making** in AI development

Shape Global Benchmarking

Participate in **TRUE framework** development and adoption

The Path Forward

1. Open Components
2. TRUE Standards
3. Global Network
4. Linux of AI

Build with Reproducibility

Make **reproducibility** a core design principle

Join the Movement

Together we can build an **open, transparent, and trustworthy** AI ecosystem

TRUE Framework

v1.0

T Transparent R Reproducible U Understandable E Executable

Evaluate the openness and reproducibility of open LLMs

Start New Evaluation

Tip: Enter a URL or click on the input field to see popular model suggestions. Click "Auto-Analyze & Start Evaluation" to begin.

https://github.com/owner/model-repo or https://huggingface.co/model

Auto-Analyze & Start Evaluation

Evaluation Leaderboard

All Tiers | Search models... | Current Run | Historic Total

Rank	Model	Evals	Score	Tier	T	R	U	E	Date
1	nanonets/...	1	18/30	Silver	6	4	4	4	10/20/2025

TRUE DEMO

TRUE SPECIFICATION

Thank You & Q&A

Let's build the Linux of AI, together

Join Us!

Scan to join our community
aivisionforum.groups.io

Connect with Chris Xie

LinkedIn profile
linkedin.com/in/chrisxie-us

Connect with Jesse McCrosky

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linkedin.com/in/jesse-mccrosky

OLD slides 9 to 17

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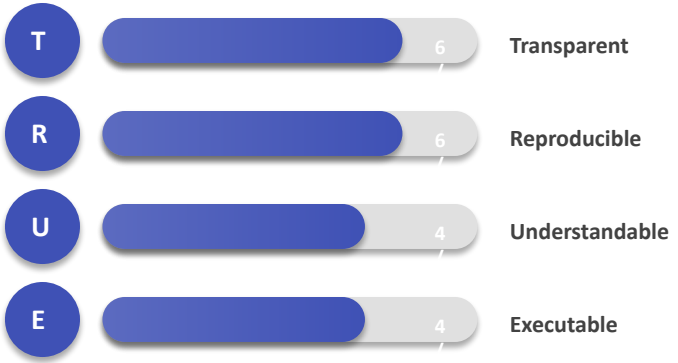

Total Score **20/20**

TRUE Rating System

TRUE Platinum	TRUE Gold	TRUE Silver	Not TRUE
18-20	15-17	12-14	< 12 points

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