

LF AI: Accelerating Open Source AI Innovation and Collaboration

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LF AI is an LF umbrella foundation founded in March 2018 to support collaboration and open source innovation in the AI, ML, and DL

<https://lfai.foundation>

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|------------------|-----------|----------|---------|-----------|----------|---------|------|------------------------|-------------|
| Machine Learning | Framework | Platform | Library | Framework | Platform | Library | Tool | Reinforcement Learning | Programming |
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|----------------------|------------|----------------|------------|-------------------|------------|---------------------|---------------|---------------------|-------------------------|------------|
| Notebook Environment | Versioning | Store & Format | Operations | Stream Processing | SQL Engine | Feature Engineering | Visualization | Pipeline Management | Labeling and Annotation | Governance |
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|-------|--------------|----------|-----------|--------------------|-------------|----------|-----------|------|----------------|-------------|-----------------|
| Model | Benchmarking | Training | Parameter | Format & Interface | Marketplace | Workflow | Inference | Tool | Explainability | Adversarial | Bias & Fairness |
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|-----------------------|------------------------|-----------|--------------------|-----------------------------|-----------|
| Distributed Computing | Computing & Management | Interface | Security & Privacy | Natural Language Processing | Education |
| | | | | | |

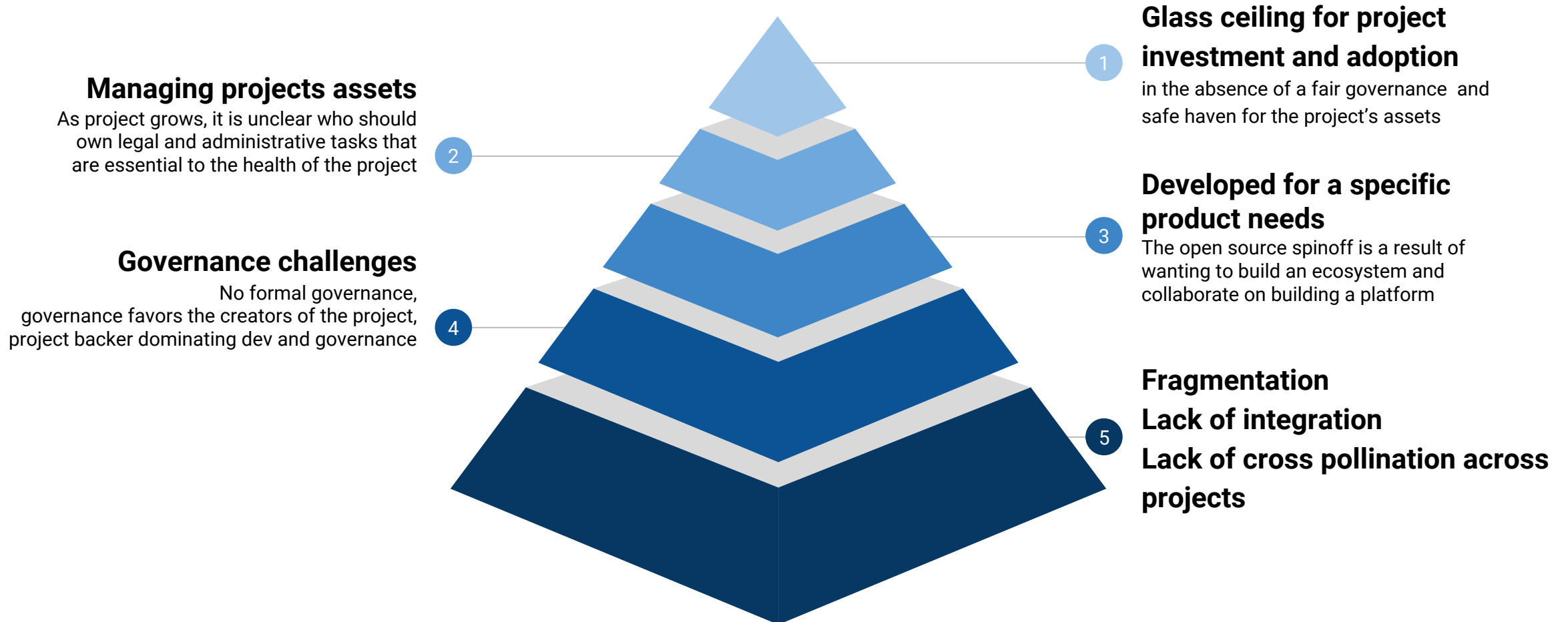


l.fai.foundation

The LF AI landscape explores open source projects in the domains of artificial intelligence, machine learning, and deep learning.



Open Source AI - Ecosystem Challenges



Motivations for Harmonization

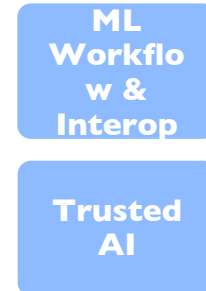
1. Better integration, interoperability and capabilities across projects
2. Greater efficiency for members across various costs spent on supporting and growing the ecosystem
3. Unified guidance for end users on tools, interoperability, integration, standards, and the future of AI, Data and Analytics as its use continues to grow in every industry
4. Hosting projects under a single umbrella enables closer collaboration and integration across projects and is a proven recipe for building a strong open ecosystem

LF AI Structure

Funding Governance



Technical Coordination



Hosted Projects

Graduated LFAI Projects (3)

| | | |
|---|--|---|
| <p>Acumos ★ 10 LF Artificial Intelligence Foundation</p> | <p>Angel ★ 5,881 Angel-ML LF Artificial Intelligence Foundation</p> | <p>ONNX ★ 8,664 ONNX LF Artificial Intelligence Foundation</p> |
|---|--|---|

Incubating LFAI Projects (10)

| | | | | |
|---|--|--|---|--|
| <p>Adlik ★ 114 LF Artificial Intelligence Foundation</p> | <p>EDL ★ 88 Elastic Deep Learning LF Artificial Intelligence Foundation</p> | <p>ForestFlow ★ 22 LF Artificial Intelligence Foundation</p> | <p>Horovod ★ 9,547 LF Artificial Intelligence Foundation</p> | <p>Ludwig ★ 6,834 LF Artificial Intelligence Foundation</p> |
| <p>Marquez ★ 315 LF Artificial Intelligence Foundation</p> | <p>Milvus ★ 3,674 LF Artificial Intelligence Foundation</p> | <p>NNStreamer ★ 237 LF Artificial Intelligence Foundation</p> | <p>Pyro ★ 6,310 LF Artificial Intelligence Foundation</p> | <p>sparklyr ★ 745 LF Artificial Intelligence Foundation</p> |

Governance

- › Foundation governance: funding effort to support technical projects hosted under the Foundation
- › Technical governance: hosted projects have their own independent technical governance
- › The Foundation's Charter is available from <https://lfai.foundation>
- › Dedicated Staff

LF AI Major Efforts

Neutral Environment

Provide a neutral environment and an open governance that fosters collaboration and cross-pollination across projects and communities

Vendor neutral
Not-for-profit
Open governance
IP clarity

Harmonization, Interoperability

Increase efforts to harmonize AI/ML/DL open source projects and reduce fragmentation; increase interoperability among technical projects

Technical Advisory Council
ML Workflow & Interop
Cross-Foundation Collab
Integration across projects

Trusted and Responsible AI

Become the home of open source trusted and responsible AI, both at the level of technical projects and also at the level of principles and guidelines

Trusted AI
Committee

Data, Models, Marketplace

Host open source models and provide supporting tools; publish best practices; offer a marketplace for AI/ML/DL models

Open source marketplace
Open source AI models

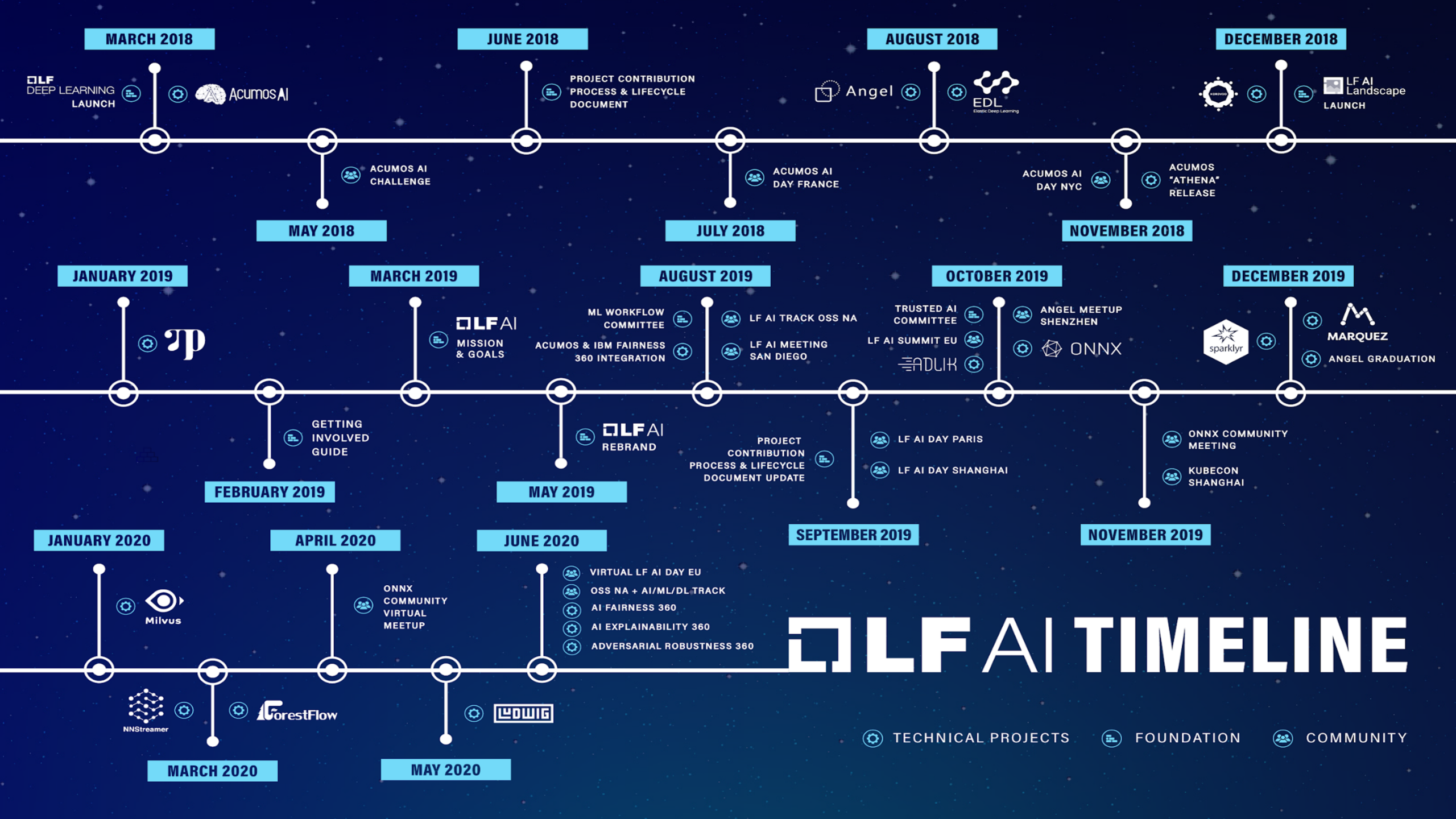
Funding and Awareness

Provide a funding model for key projects

Increase awareness via a number of marketing and outreach activities

Training courses published in edX

Funding model
LF AI Days
LF AI Summits
Marketing services
PM services
Event services




Members

| | | | | | | | |
|-----------|---|---|---|---|---|---|---|
| Premier |  |  |  |  |  | | |
| |  |  |  |  | | | |
| General |  |  |  |  |  |  |  |
| Associate |  |  |  |  |  |  |  |

Projects

Graduation


Graduated LFAI Projects (3)



Acumos ★ 10
LF Artificial Intelligence Foundation



Angel-ML ★ 5,881
LF Artificial Intelligence Foundation



ONNX ★ 8,664
LF Artificial Intelligence Foundation

Incubation


Incubating LFAI Projects (10)




Adlik ★ 114
LF Artificial Intelligence Foundation




Elastic Deep Learning (EDL) ★ 88
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sparklyr ★ 745
LF Artificial Intelligence Foundation

Incubating Projects

- › LF AI's TAC committee is responsible to voting in new incubation projects.
- › The TAC meets bi-weekly and generally booked 4-6 weeks in advance.
- › Proposing projects for incubation in LF AI:
<https://lfai.foundation/proposal-and-hosting-process/>

Project Resources

Hosted project stages and life cycle: <https://lfai.foundation/project-stages-and-lifecycle/>

Offered services for hosted projects:
<https://lfai.foundation/services-for-projects/>

Companies hosting projects in LF AI

amazon

 **AT&T**

Baidu 百度


DREAMWORKS

FACEBOOK

IBM

 Microsoft

 **Studio**[®]

SAMSUNG

**Tech
Mahindra**

Tencent 腾讯

Uber

wework

ZILLIAC
Reinvent Data Science

ZTE

Universities Contributing Code to LF AI Projects



Stay Connected with LF AI!

› **Social**

- › Follow [@LFAI_Foundation](#) on Twitter 
- › Connect via [LF AI Foundation](#) on LinkedIn 

› **Mail Lists**

- › [TAC](#) - Participate in technical governance and hear about LF AI projects
- › [Events](#) - Learn about upcoming events
- › [Announce](#) - Stay in the loop on top level Foundation information

› **Blog**

- › Check the latest news on our [Blog](#) 

Joining LF AI Foundation is easy!

Please follow up with [Ibrahim Haddad](#)

Web site <https://lfai.foundation>

Email info@lfai.foundation

Landscape <https://l.lfai.foundation>

GitHub <https://github.com/lfai>

Wiki <https://wiki.lfai.foundation>

Mailing lists <https://lists.lfai.foundation/groups>