Overview of the LF AI Foundation

THE LINUX FOUNDATION

LF AI

What is the LF AI Foundation?

- LF AI is a Linux Foundation project founded in March 2018 to support collaboration and open source innovation in the AI, ML, and DL domains.

- LF AI members are collaborating to create a neutral environment with an open governance for harmonization and acceleration of separate technical projects focused on AI, ML, and DL technologies.

Mission

Build and support an open AI community, and drive open source innovation in the AI, ML and DL domains by enabling collaboration and the creation of new opportunities for all the members of the community

Members

Premier Members

General Members

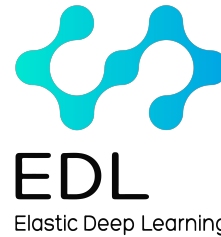# Current Projects

Acumos

Machine learning platform and marketplace for ML models.

Contributed by AT&T

Angel

A high-performance distributed ML platform based on Parameter Server, running on YARN and Apache Spark.

Contributed by Tencent

EDL
Elastic Deep Learning

A framework designed to help DL cloud service providers to build cluster cloud services using different DL frameworks.

Contributed by Baidu

HOROVOD

Distributed training framework for TensorFlow, Keras, and PyTorch.

Contributed by Uber

Pyro

Pyro is a universal probabilistic programming language written in Python and supported by PyTorch on the backend. It enables flexible and expressive deep probabilistic modeling, unifying the best of modern deep learning and Bayesian modeling
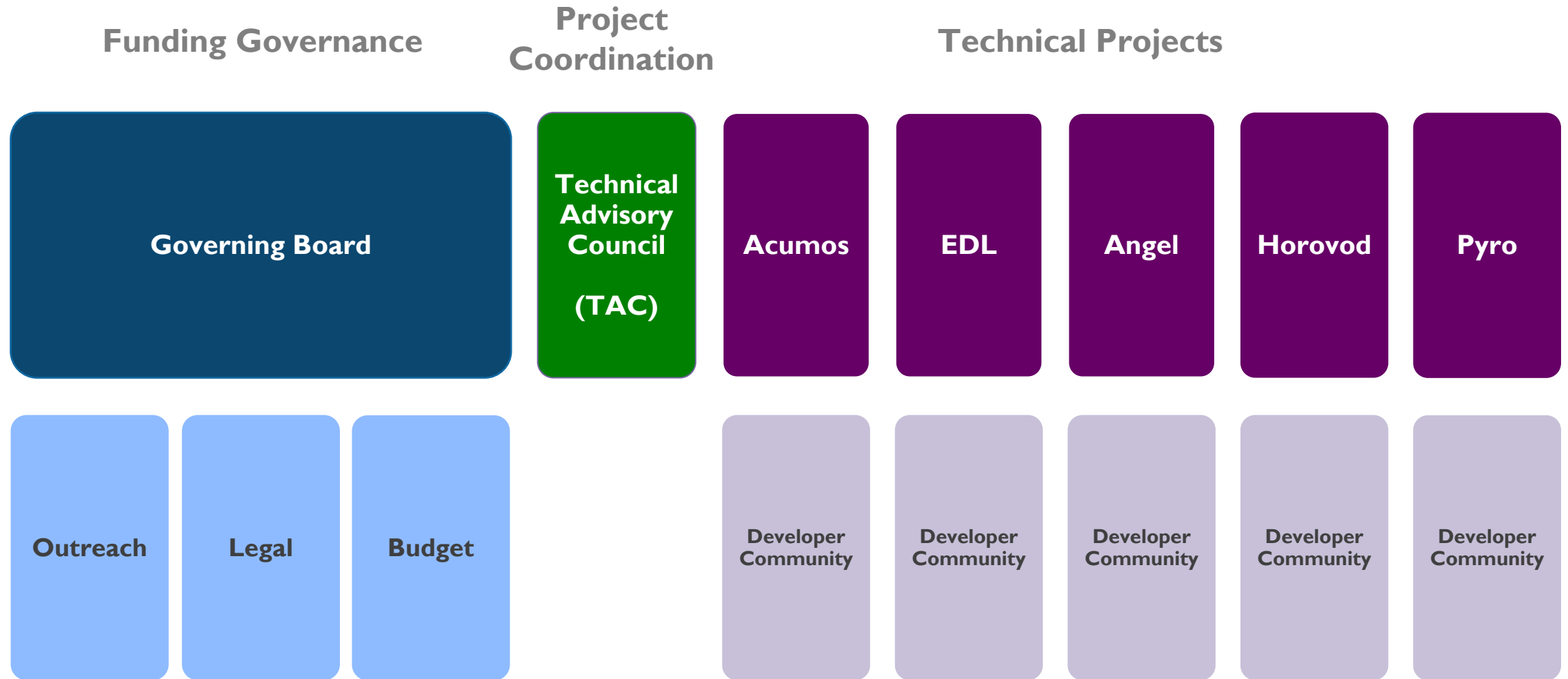
Contributed by Uber

Universities Contributing to LF AI Projects

- Georgia Tech
- University of British Columbia
- Stanford University
- MIT
- Harvard University

- Oxford University
- Penn University
- NYU
- Florida State University
- University of Copenhagen

Governance Overview

› LF AI is a single funding effort to support technical projects hosted under the Foundation.

› Technical projects have their own technical governance following our principle of separation of technical governance from funding governance.

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Structure

Funding Governance

Project Coordination

Technical Projects

Governing Board	Technical Advisory Council (TAC)	Acumos	EDL	Angel	Horovod	Pyro
Outreach · Legal · Budget		Developer Community	Developer Community	Developer Community	Developer Community	Developer Community

LF AI Detailed Governance Presentation

Governing Board

› Composition:

  › Appointees of Premier Members

  › Representative of General Members (elected annually)

  › TAC Chair (elected annually)

› Responsibilities include:

  › Strategic direction and evolution of the LF AI Foundation

  › Funding the Foundation

  › Approving Graduate projects

› Meets monthly over a conference call

Technical Advisory Council (TAC)

› Membership on the TAC is made up of Premier Member appointees and a representative of "<u>Graduate</u>" projects.

› The TAC serves a coordination role:

   › Facilities communication across and among the supported technical projects; and

   › Communicates needs and requirements of the projects to the Governing Board

   › Onboards new projects, assists in progression of existing projects, and reviews projects annually

   › Defines and maintains the technical vision for the LF AI Foundation

   › Vote on approving new projects joining the LF AI as incubation or graduate projects

   › Creates a conceptual architecture for the projects,aligning projects, removing or archiving projects

   › Defines common practices to be implemented across LF AI projects

› Meetings via conference calls take place every 2 weeks, are recorded and open to the general public.

   › https://wiki.lfai.foundation/pages/viewpage.action?pageId=7733341

Outreach Committee

› Composition:

  › One appointed voting representative from each Premier Member

  › Each General Member may appoint a non-voting representative to observe and contribute ideas to the Outreach Committee

› Responsible for community outreach and marketing strategy

› Meetings over a monthly conference call

  › https://wiki.lfai.foundation/display/DL/Outreach+Committee

Budget Committee

› Composition:

  › Representatives of the Governing Board that volunteer to be a named participant on the Budget Committee.

› The responsibilities of the Budget Committee include:

  › Assisting the Treasurer in preparation of annual budgets that adhere to the principles and guidelines established by the Governing Board;

  › Developing and reporting metrics for the allocation of budget in relation to meeting the priorities of the Governing Board;

  › Reviewing the progress of the Directed Fund against the annual budget;

  › Preparing forecasts for future financial needs of the Directed Fund; and such other matters related to finance and the financial operation of the Directed Fund as may be directed to the Budget Committee by the Governing Board.

Legal Committee

› The Legal Committee consists of members of the Governing Board that wish to participate on the Legal Committee together with their legal counsel.

› Responsible for the creation of recommendations to the Governing Board in response to questions submitted to the Legal Committee by the Governing Board or the TAC.

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Hosting Projects under LF AI: Project Contribution Process

https://github.com/lfai/proposing-projects

On-boarding Projects into LF AI

› Projects are on-boarded and progress pursuant to the LF AI Foundation's Lifecycle and Project Contribution Process Documents.

    › Three stages: Incubation, Graduation and Archive.

    › These documents can be found on GitHub:
      https://github.com/lfai/proposing-projects

LF AI Project Maturities

› Incubation projects

Projects join LF AI as incubation by meeting the requirements set forth in the "Project Lifecycle Document".

TAC Vote.

› Graduate projects

Incubation requirements.

Additional requirements as set in the "Project Lifecycle Document".

TAC Vote + GB Vote.

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Criteria to Accept Incubation Project Under LF AI

1. Submit a completed Project Contribution Proposal to the TAC
    › Process and proposal are available on [Github](#) and on the LF AI web site

2. Present the project and the proposal to the TAC and, if requested, to the Governing Board

3. Be deemed by the TAC and Governing Board to fall within the mission and scope of LF AI Foundation and to add value to the AI/ML/DL space

4. Have an OSI-approved open source license

5. Agree to transfer any relevant trademarks to The Linux Foundation or its affiliate, LF Projects, LLC, and to assist in filing for any relevant unregistered ones

Criteria to Accept Graduation Project Under LF AI

In addition to the Incubation stage requirements, a project must meet these requirements:

1. Have a healthy number of committers from at least two organizations*

2. Have achieved and maintained a [Core Infrastructure Initiative Best Practices Badge](#)

3. Demonstrate a substantial ongoing flow of commits and merged contributions

4. Document current project owners and current and emeritus committers in OWNERS.md and COMMITTERS.md files

5. A copy of the project's charter (or other governance document) shall be included or linked to in a GOVERNANCE.md or in a similar file

6. Have a technical lead appointed for representation of the project to the TAC

7. Receive the affirmative vote of 2/3 of the TAC and the affirmative vote of the Governing Board
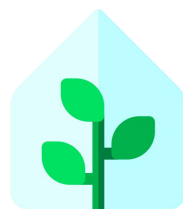
LF AI has a modular approach to hosting projects.

The Linux Foundation and LF AI provide the support for open development to occur among a diverse and thriving community, in addition to a number of enabling services that include membership and funding, ecosystem development, legal, PR and marketing, events, and compliance scans.

Direct Benefits of Hosting Projects at the LF AI

1. Maintain your committers and define your own project governance (as long as its neutral)
2. A not-for-profit, neutral home increases contributions from external organizations
3. LF AI staff eager to assist (Executive Director, Project Manager, IT staff, PR, marketing, events, etc.)
4. LF AI PR or blog post announcing the inclusion of the project
5. Infrastructure resources (wiki, build, jira, mailing lists, support staff, etc.)
6. Neutral hosting of the project's trademark
7. An initial license scan of the project's codebase
8. Cross pollination opportunities with other LF AI projects
9. Endorsement by LF AI Technical Advisory Committee (TAC) - Appointment of an existing TAC member as a sponsor of the project and provide recommendations regarding governance best practices
10. Right to refer to the project as a "LF AI Foundation Project," with the right, subject to applicable trademark usage guidelines, to display the LF AI logo on the project's code repository
11. Graduation stage may receive support as determined by the Governing Board

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Our Value Proposition to Projects

01 Governance Structure

02 Membership Management

03 IP Management

04 Hosting Infrastructure

05 Ecosystem Development

06 Critical Mass at Launch

07 Marketing Platform

08 Awareness and Reach

09 Project Guidance

10 Events Support

11 Trademark Support

12 Independent Neutral Home

13 Funding Model

14 Compliance Scans

15 CLA Management

16 Creative Services

17 Dedicated Staff

18 Validation from a trusted source

19 Collaboration opp with other projects

Contact Us!

› LF AI is actively reaching out to open source AI/ML/DL projects for contribution and collaboration. If you have a project that could benefit from:

  › Community building

  › Marketing and brand outreach strategies

  › Developer support

  › Collaboration with other projects

› info@lfai.foundation

Joining the LF AI Foundation

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Membership Benefits

Organizations join LF AI because they want to take an active role in supporting the growth and evolution of the open source AI/ML/DL ecosystem.
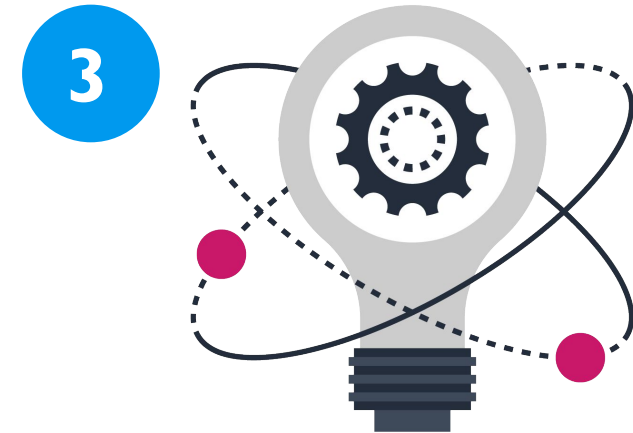
Membership Provides:

1 Marketing Amplification and Brand Awareness

2 Community Engagement

3 Thought Leadership

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LF AI Foundation Annual Dues

	Not Yet a Linux Foundation Member	Existing Linux Foundation Member
Premier Member	$120,000	$100,000
General Member	5,000 employees +: $45,000 2,000 - 4,999: $30,000 500 - 1,999: $25,000 Up to 499 employees: $10,000	5,000 employees +: $25,000 2,000 - 4,999: $15,000 500 - 1,999: $10,000 Up to 499 employees: $5,000
Associate Member	Free Limited to academic and nonprofit institutions respectively and requires approval by the Governing Board	

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Premier Membership

Highest tier of membership – For organizations who contribute heavily to open source AI, ML and DL and bring in their own projects to be hosted at the Foundation. They work in concert with LF AI + LF team members. These companies want to take the most active role in enabling open source AI, ML and DL.

Premier members are eligible to:

(Enjoy all the benefits of General level, plus;)
- Appoint one representative to the LF AI Governing Board.
- Appoint one representative as a voting member in any subcommittees or activities of the Governing Board.
- Enjoy most prominent placement in displays of membership including website and marketing materials.
- Increased access to Linux Foundation's invitation-only Open Source Leadership Summit.
- Create an individualized press release upon membership announcement with the LF AI PR team.
- Receive ongoing, individual engagement and guidance from LF AI Executive Director and staff.

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General Membership

Targeted for organizations that want to put their organization in full view in support of LF AI and our mission. Organizations that join at the General level are deeply committed to using open source technology, helping LF AI grow, voicing the opinions of their customers, and giving back to the community.

General members are eligible to:

- Participate in elections to appoint one representative to the LF AI Governing Board per every ten General members, up to three maximum General representatives.
- Receive greater insight into LF AI strategy and project roadmaps through increased engagement with the LF AI Executive Director and staff.
- Create an individualized press release upon membership announcement with the LF AI PR team.
- Participate in all Marketing, Community, Thought Leadership opportunities.
- Demonstrate your support for LF AI by displaying your logo on the LF AI website and in marketing materials.

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Associate Membership

The Associate membership is limited to academic and non-profit institutions respectively.

Associate members are eligible to:

- Participate in all Marketing, Community, and Thought Leadership opportunities.

- Identify your organization as a member and display your logo on the LF AI website and in marketing materials.

- Feature your organization in the new member announcement.

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LF AI Landscape

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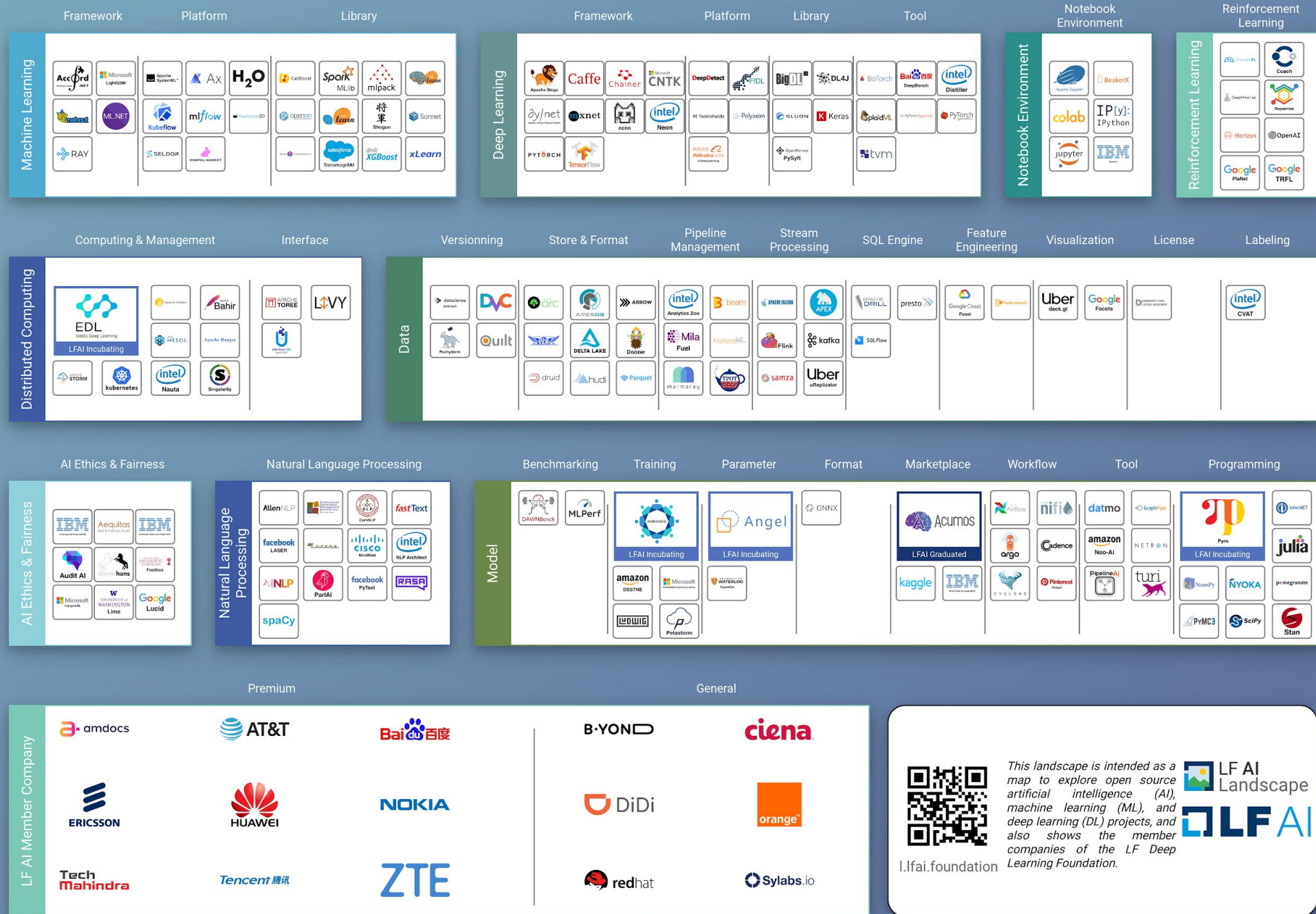
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Joining LF AI Foundation is easy!

Please follow up with Ibrahim Haddad

Web site: https://lfai.foundation
Landscape: https://l.lfai.foundation
GitHub: https://github.com/lfai
Wiki: https://wiki.lfai.foundation/

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