LF AI & Data Foundation Technical Advisory Council (TAC) Meeting Minutes
May 18, 2023 (6:00am - 7:00am PST) via Zoom

TAC Meetings are bi-weekly and open to everyone in the LF AI & Data community.

Voting Notes
Under the original charter rules we need 50% attendance from the voting members (represented by premier members + graduate projects) to meet quorum. To ensure quorum is met more consistently, the TAC implemented the following attendance and voting eligibility rule effective Dec 1, 2022: Voting members of the TAC who miss 2 consecutive meetings will not be allowed to vote and must then attend 2 consecutive meetings before their voting privileges are reinstated.
With the new attendance and voting rule adopted by the TAC, the number of eligible voting members varies per week and is tracked here. Please see meeting minutes on the TAC Wiki for details on attendance and voting eligibility on a per meeting basis.

Please see the TAC Wiki for more information about voting.
Please see current voting members, including alternates, on the TAC Wiki.

Voting details for today's meeting: 5 voting members were eligible to vote and 4 voting members were in attendance. Quorum was not met for this meeting.

TAC Voting Member	Voting Representative	5/18/2023
Quorum	**Attendance/No. Eligible Votes**	**0.4**
4paradigm	Zhongyi Tan	Jerry Tan
Baidu	Jun Zhang	
	Alternate: Daxiang Dong	
	Alternate: Yanjun Ma	
Ericsson	Rani Yadav-Ranjan	
Huawei	Howard (Huang Zhipeng)	
	Alternate: Charlotte (Xiaoman Hu)	
	Alternate: Leon (Hui Wang)	
Nokia	Michael Rooke	Michael Rooke
	Alternate: Jonne Soininen	
OPPO	Jimmy (Hongmin Xu)	

SAS	*Nancy Rausch	
	Alternate: JP Trawinski	
ZTE	Wei Meng	Wei Meng
	Alternate: Liya Yuan	
Adversarial Robustness Toolbox Project	Beat Buesser	
	Alternate: Kevin Eykholt	
Angel Project	Jun Yao	
Egeria Project	Mandy Chessell	
	Alternate: Nigel Jones	
	Alternate: David Radley	
	Alternate: Maryna Strelchuk	
	Alternate: Ljupcho Palashevski	
	Alternate: Chris Grote	
Flyte Project	Ketan Umare	
Horovod Project	Travis Addair	
Milvus Project	Xiaofan Luan	
	Alternate: Jun Gu	
ONNX Project	Alexandre Eichenberger	Alexandre Eichenberger
	Alternate: Jim Spohrer	Alternate: Jim Spohrer
	Alternate: Prasanth Pulavarthi	
	Alternate: Andreas Fehlner	
Pyro Project	Fritz Obermeyer	

Note for Voting Members

Please ensure you attend the bi-weekly TAC meetings to maintain voting eligibility. If you have not already provided an alternate representative, please email Nancy Rausch (Nancy.Rausch@sas.com), TAC Chair AND operations@lfaidata.foundation to designate an alternate representative. It is critical to meet quorum during the meetings especially when there are voting items on the agenda.

LF Attendees
Ibrahim Haddad, Executive Director, LF AI & Data
Lucy Hyde, Program Manager, Linux Foundation
Reden Martinez, Project Coordinator, Linux Foundation

Invited Guests/Presenters
Ahmed Banifatemi
Babak Hodjat
Olivier Francon

Call to Order
Ibrahim Haddad (IH) on behalf of Nancy Rausch (NR) called the meeting to order at 6:07 am
Pacific and Reden Martinez (RM) recorded the minutes.

IH reviewed the antitrust policy notice and shared the link where to review all the recordings of
the previous meetings.

IH also shared useful links for all LF AI & Data related content and information.

Agenda
Ibrahim Haddad (IH) reviewed the agenda for the meeting. There were no further changes or
additional topics added.
 › Roll Call (1min)
 › Approval of Minutes from previous meeting (2 mins)
 › Vote on the project lifecycle doc (5mins)
 › Resilience from XPRIZE proposed new Sandbox project review (40 mins)
 › Open Discussion

Approval of Minutes
Ibrahim Haddad (IH) deferred the approval of the May 4th minutes to the June 1st TAC
Meeting.

Project Lifecycle Document
Ibrahim Haddad (IH) deferred the vote for approval of the Project Lifecycle Document to the
June 1st TAC Meeting.

Project incubation Proposal: PROJECT RESILIENCE

Amir Banifatemi (AB) opened up the presentation with the goal to create an open platform to help tackle systemic challenges and offer decision-making support. AB provided examples of possible challenges such as major disruptions due to COVID-19, water citation, airline-related and other major climate issues, stating that policy makers need to make decisions on behalf of public safety due to public outcry.

AB also shared that having little data challenges decision-making and outlining a need for tools to help leaders predict, mitigate, and prescribe actions.

AB shared that during the beginning and height of the COVID-19 pandemic, many western cities had access to and utilized their own resources (e.g. data scientists and major organizations with knowledge bases) to inform policy and temporary decisions. AB highlighted that resources were not generally available to other committees and countries.

AB discussed the project's initiatives, aiming to provide public access to cloud-based prediction tools or prescription tools and discussed contributions to the Linux Foundation, including a desire to increase visibility and partner with other LF-hosted climate projects. AB stressed that the intent is for Project Resilience to remain a globally-available, not-for-profit project, particularly as they also partnered with a UN Agency, ITU. AB outlined core areas of the project: to keep the project transparent and have an open governance model; provide trust in contributors and adopters in the design of the project and assets; and neutral management of projects's assets by the foundation. AB also introduced the team working on the project, stating that roughly twenty individuals are currently contributing, and invited Babak Hodjay (BH) to discuss technical areas of the project.

Babak Hodjat (BH) continued the presentation and shared observations on the beginning stages of the COVID-19 pandemic, discussing the differences in actions, questions surrounding public impact and how it led to the emergence of questions about the role of AI in the pandemic. BH provided the origins of Project Resilience, through its preliminary beginnings, examination of available data, and discovery that information regarding actions and policies were lacking and unstandardized globally. BH stated that the team obtained data from Oxford University, where volunteers were actively collecting and harmonizing news and local information; the data provided insights into the policies that were put in place. BH described how the team began building models to develop policy recommendations uncovering 104 other data science teams from 28 countries were also working on similar initiatives. BH stated that this ultimately led to the realization of the power of collaborative effort globally.

BH further discussed the COVID-19 use case, highlighting several graphs and metrics *(see presentation)*

The system is up and running and more information is available in the link below.
Data available is updated until January 2023.
https://evolution.ml/demos/npidashboard/

BH then shared next steps for Project Resilience, where the team anticipates expanding the project's scope beyond the pandemic to apply models and insights generated to address other global issues, such as poverty and water management. BH stated that many issues may rely on localized solutions but could benefit from a global perspective, where communities could utilize the models already created to predict future outcomes in the presence of specific policies and subsequently prescribe optimized solutions.

BH outlined future efforts to achieve the mentioned goals: establishing a platform where individuals can contribute their expertise and data to the models, maintaining certain standards to ensure the quality and reliability of the contributed models, and compiling/combining these models in an open manner to make them publicly accessible.

BH stated that the team recognizes the urgency of climate change, and that the MVP project focuses on addressing this critical issue. The project initially outlines its scope, highlighting the data required for analysis: contextual observation data, action data indicating the measures taken, and outcome data relating to emissions, energy production, and cost. With a multi-objective approach, the project aims to transition from less green to more green energy sources, balancing increased energy production while reducing transition costs and emissions.

BH shared the Architecture for MVP and its requirements:

- Component 1 and 7: Secure AI Development Environment for AI community contributors (e.g., AWS Service Catalog)
- Component 2: Data Science Developer IDE (e.g., SageMaker Studio domain)
- Components 3 and 4: MLOps for automated model development and deployment workflow (e.g., SageMaker MLOps project templates)
- Components 5 and 6: Automated quality, governance, and regulations for Models (CI/CD workflows)
- Component 8: Data Store (Secured Data Lake)
- Component 9: Insight analysis (e.g., Amazon QuickSight and Web App)
- Component 10: Bring your Own Model

BH outlined the project's future direction and discussed the volunteers needed for the project:
- Tech program management
- AI/ML
- Data Science
- Dev and System Ops
- UI/UX
- Legal/Security/Privacy

BH also covered project needs; obtaining support for project costs, including hosting expenses and potential contributions to local teams, is a key priority. Ultimately, the vision is to establish a portal where AI teams can gather, fostering collaboration instead of competition.

BH discussed the Data Contributions Needs:
- To identify contributors and their roles (relationships) as data suppliers (sources)
- To evaluate conversion of collected data into publicly available data and/or data sets for predictors
- To get help validate data quality with appropriate KPIs
- To get data clearing house support as a platform to aggregate the data
- To curate data with common data models for shared taxonomy
- To support data features (context/action/ outcomes) and repositories (local storages)
- To support data life cycle management
- To ensure security, privacy, and trust as well as legal compliance including data ownership

AB answered a question from the chat box from Jim Spohrer (JS) regarding a published article on the project. SB shared that the team is working on an article. And Olivier Francon (OF) has shared the link in the chat box.

The COVID-19 research is published here: https://ieeexplore.ieee.org/document/9366776

AB expressed that the ultimate objective of the project is to provide end users with publicly accessible and valuable information that can assist them in making informed decisions. This goal is similar to platforms like www.weather.com, where users can simply enter their city and receive relevant and useful information.

AB shared the Project Outcome expected with LF:
- An open portal + platform to integrate constituents of a collaborative AI decision-augmentation system
- Help decision making authorities and organizations tackling issues such as climate change, ecological disasters, disease control, water management, economic inequity, diversity and inclusion
- A framework for collaboration on AI predictive and prescriptive models
- Allow for:
  - Local Learnings, Data agency, and Model development and deployment in various communities
  - All models harnessed into a greater global whole

BH shared the [portal](#) showing the data of Covid 19 updated until January 2023.

TAC Members, please find the following project information:
Slack: (projectresiliencehq.slack.com), and contributions are tracked in GitHub Account (https://github.com/orgs/Project-Resilience).

Open Discussion
Ibrahim Haddad (IH) opened the meeting for questions.

Michael Rooke (MR) asked of the data origins and if there are any licensing associated with the data both in use and in gathering the data.

BH answered that the data itself is currently focused only on publicly available data with minimal licensing requirements so these are the open data sources. For the ensembled models, it should be accessible and open for the use of everyone.

IH asked if there is a GitHub presence regarding various artifacts related to the projects. BH answered yes and OF shared the Github repository link in the chat box.

21:55:54 From Olivier Francon to Everyone:
The GitHub repo is here: https://github.com/Project-Resilience/mvp

IH has postponed the voting of the project approval due to lack of quorum. The LF team will open the voting in 5 business days. IH will reach out to AB and BH regarding the result of the voting.

IH deferred all voting actions to the June 1st TAC meeting due to not reaching quorum.

Upcoming TAC Agendas

> › June 1 – Open Voice Network Presentation
> › June 15 – EthicalAI from Fujitsu, new Sandbox project proposal

Please note the TAC is always open to agenda suggestions and guest presentations. If you have a topic you would like to request, please email tac-general@lists.lfaidata.foundation for review and coordination via the TAC Chair accordingly.

Closing
With no further business, the meeting was adjourned by IH at 6:56am Pacific.

Chat:
21:43:48 From Jim Spohrer (ISSIP) to Everyone:
    Truly fascinating project. Is there a (preferred) published article on the project that can be used in citing this work in other publications?
21:44:54 From Olivier Francon to Everyone:
    The covid19 research has been published here: https://ieeexplore.ieee.org/document/9366776
21:45:13 From Jim Spohrer (ISSIP) to Everyone:
    Thank-you!
21:47:35 From Olivier Francon to Everyone:
    https://evolution.ml/demos/npidashboard/
21:55:54 From Olivier Francon to Everyone:
    The GitHub repo is here: https://github.com/Project-Resilience/mvp
21:58:20 From Ali H to Everyone:
    Excellent work, thank you for presenting
21:58:27 From Jim Spohrer (ISSIP) to Everyone:
    Thank-you! Bye!