## LF AI & Data Foundation Technical Advisory Council (TAC) Meeting Minutes August 24, 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 I, 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 <u>here</u>. Please see meeting minutes on the <u>TAC Wiki</u> for details on attendance and voting eligibility on a per meeting basis.

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

# Voting details for today's meeting: $\underline{8}$ voting members were eligible to vote and $\underline{8}$ voting members were in attendance. Quorum was met for this meeting.

TAC Voting Member	Voting Representative	8/24/2023
Quorum	Attendance/No. Eligible Votes	
4paradigm	Zhongyi Tan	
Baidu	Jun Zhang	
	Alternate: Daxiang Dong	
	Alternate: Yanjun Ma	
Ericsson	Rani Yadav-Ranjan	
Huawei	Howard (Huang Zhipeng)	Howard (Huang Zhipeng)
	Alternate: Charlotte (Xiaoman Hu)	
	Alternate: Leon (Hui Wang)	
IBM	Susan Malaika	Susan Malaika
	Alternate: Beat Buesser	

	Alternate: Alexandre Eichenberger	
Nokia	Michael Rooke	Michael Rooke
	Alternate: Jonne Soininen	
OPPO	Jimmy (Hongmin Xu)	
SAS	*Nancy Rausch	*Nancy Rausch
	Alternate: JP Trawinski	
ZTE	Wei Meng	
	Alternate: Liya Yuan	Alternate: Liya Yuan
Adversarial Robustness Toolbox Project	Beat Buesser	Beat Buesser
	Alternate: Kevin Eykholt	
Angel Project	Jun Yao	
Egeria Project	Mandy Chessell	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: Prasanth Pulavarthi	
	Alternate: Andreas Fehlner	
Pyro Project	Fritz Obermeyer	
OpenLineage	Julien Le Dem	

Alternate: Mandy Chessell	Alternate: Mandy Chessell
Alternate: Michael Robinson	

## 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, VP Strategic Programs Lucy Hyde, Senior Program Manager, Linux Foundation Reden Martinez, Project Coordinator, Linux Foundation Nora Anwar, Comms & Manager, Linux Foundation Nathan Southern, Project Coordinator, Linux Foundation

## **Invited Guests/Presenters**

- Hiro Kobashi, Project Director, Fujitsu Representing SapientML Project
- Masahiro Fukuyori, Researcher, Fujitsu Representing AutoML Project

## Call to Order

Nancy Rausch (NR) called the meeting to order at 6:03 am Pacific and Reden Martinez (RM) recorded the minutes.

NR reviewed the antitrust policy notice.

## Agenda

Nancy Rausch (NR) reviewed the agenda for the meeting. There were no further changes or additional topics added.

Roll Call (1 mins)

- > Approval of Minutes from previous meetings (2 mins)
- SapientML Sandbox Project Proposal
- > Open Discussion

#### **Approval of Minutes**

Nancy Rausch (NR) presented a resolution to approve the minutes of the August 10, 2023 TAC meeting.

#### **Proposed Resolution:**

That the minutes of the August 10, 2023 meeting of the Technical Advisory Council of the LF AI & Data Foundation are hereby approved.

Mandy Chessell made the first motion to approve the minutes, and Alexandre Eichenberger seconded the motion.

APPROVED - By vote of the TAC, the minutes of the August 10, 2023 meeting of the Technical Advisory Council were approved.

## SapientML Sandbox Project Proposal

Nancy Rausch (NR) extended a warm welcome to Hiro Kobashi, Project Director, Fujitsu - Representing SapientML Project.

Hiro Kobashi (HK) outlined the presentation in four main sections: Background, Challenges, Project Impact, and Next Steps.

#### Background

HK emphasized the shortage of AI talent, specifically data scientists and engineers, which has been impeding the advancement of AI, as indicated by a McKinsey study. This scarcity has led to a deceleration in AI applications. In reaction to this, Automated Machine Learning (AutoML) has emerged as a resolution, automating AI processes. AutoML expedites the creation and deployment of precise AI models, even in the absence of data scientists.

#### Challenges

HK elaborated further on the limited adoption of AutoML tools, attributing this challenge to their time-consuming nature, the demand for substantial computational resources, and the inherent black-box nature of the AI models they generate. As for success factors, the speed at which an

AutoML model can be created to align with data scientists' routines takes precedence. The integration of code synthesis with explanations fosters iterative improvements, a pivotal aspect of the AutoML process. Undoubtedly, accuracy remains a paramount consideration at all stages of AI model creation.

Hence, the development of the SapientML Project.

#### How SapientML Helps

Hiro Kobashi explained that SapientML is a Meta-Learning based AutoML approach aimed at enhancing the success of AI model creation. This offers significant advantages to numerous data scientists. To achieve the realization of SapientML, a two-fold approach was adopted: extracting expert knowledge from codes and fostering interaction with data scientists.

#### **Next Steps**

The upcoming developments for SapientML include adding support for more dataset metafeatures, expanding the range of machine learning components (including preprocessing and different models), and accumulating a broader collection of datasets and ML pipelines from the community. These steps are designed to enhance SapientML's capabilities, resulting in more accurate and tailored AI model generation.

To summarize, the SapientML Project is a Meta-Learning based AutoML initiative designed to enhance the success of the AI model creation process. Presently, the project is applying Sandbox stage in collaboration with LFAI & Data.

#### Proposed Resolution:

That the SapientML project is approved by the Technical Advisory Council (TAC) as a Sandbox project of the LF AI & Data Foundation.

Mandy Chessell made the first motion to approve, and Susan Malaika seconded the motion.

APPROVED - By vote of the TAC, the SapientML project was approved as a Sandbox project.

## **Open Discussion**

During the discussion, Nancy Rausch (NR) asked how the algorithm decides on pipeline stages, and Hiro Kobashi (HK) explained the features used for this prediction. Additionally, HK confirmed that data characteristics influence the selection of preprocessing methods.

HK also discussed the LFAI & Data project that SapientML can collaborate with. One of these projects is Project Acumos. Susan Malaika (SM) clarified this, and HK explained that currently, SapientML is only capable of creating AI models. This is an area where they could gain advantages by collaborating with Project Acumos, particularly in terms of deployment.

#### **Upcoming TAC Meetings**

September 7, 2023 - Updates from: Trusted AI Committee and MLSecOps Committee September 21, 2023 - Marquez Graduation Request and AIDA 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 <u>tac-general@lists.lfaidata.foundation</u> for review and coordination via the TAC Chair accordingly.

#### Closing

With no further business, the meeting was adjourned by NR at 7:40 AM Pacific.

#### Chat:

21:02:52 From Ibrahim Haddad To Everyone:
Hi everyone! welcome to the TAC call today
21:03:10 From Susan Malaika @IBM (voting) To Everyone:
Reacted to "Hi everyone! welcome" with 窗
21:05:25 From Nora Anwar To Everyone:
Reacted to "Hi everyone! welcome" with 😂
21:06:25 From Ibrahim Haddad To Everyone:
Welcome Fujitsu team. This is the second project proposed from Fujitsu to host in AI &
Data.
21:06:42 From Fukuyori (Fujitsu) To Everyone:
Reacted to "Welcome Fujitsu team" with 👍
21:07:33 From LF AI & Data Zoom General To Everyone:
Reacted to "Welcome Fujitsu team" with 👍
21:07:35 From LF AI & Data Zoom General To Everyone:
Reacted to "Welcome Fujitsu team" with Ő
21:12:14 From Susan Malaika @IBM (voting) To Everyone:
Reacted to "Welcome Fujitsu team" with Ő
21:28:34 From LF AI & Data Zoom General To Everyone:
https://arxiv.org/pdf/2202.10451v2.pdf
21:28:51 From Fukuyori (Fujitsu) To Everyone:
Reacted to "https://arxiv.org/pd" with 👍

21:31:02 From Nora Anwar To Everyone:

Reacted to "Welcome Fujitsu team..." with 🌑

21:34:02 From Susan Malaika @IBM (voting) To Everyone:

https://github.com/sapientml/sapientml

21:36:59 From Fukuyori (Fujitsu) To Everyone:

Reacted to "https://github.com/s..." with 👍

21:37:03 From Ibrahim Haddad To Everyone:

Congrats SapientML team. We will follow up with you next week on onboarding the

project in LF AI & Data

21:37:09 From Ibrahim Haddad To Everyone:

similarly to what we did with ISF.

21:37:34 From Fukuyori (Fujitsu) To Everyone:

Reacted to "Congrats SapientML t..." with 💙

21:39:03 From Ibrahim Haddad To Everyone:

Generative AI Commons - https://lists.lfaidata.foundation/g/gen-ai-committee/wiki/Home

21:39:09 From Ibrahim Haddad To Everyone:

You need to get an LF ID to login

21:40:42 From Susan Malaika @IBM (voting) To Everyone: https://lists.lfaidata.foundation/g/gen-ai-committee/messages?msgnum=24