# ML Workflow & InterOp Committee


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## Overview

The LF AI & Data Governing Board recommended having a reference ML workflow / stack, and showcasing where current LF AI hosted projects fall. T he idea is to have a reference architecture and to allow us to identify gaps in our project portfolio so we can focus on project recruitment in areas that we need most, leading us to provide a reference implementation using LF AI & Data hosted projects.

## Mailing List

Please subscribe to the ML Workflow mailing list: https://lists.lfaidata.foundation/g/mlworkflow-committee

## Meetings

Every 4 weeks on Thursday, 10am EST right after the TAC meeting.

To participate in meetings, please join the mailing list and subscribe to the group calendar: ML Workflow - Community Meetings & Calendar

Zoom:

https://zoom.us/j/9918615568?pwd=TTVaOXcyMXoxWWU4VEZWaTBPQnZIUT09

### Slack Channel and Shared Document:

1. Slack Channel
2. Shared Document

# Meetings -

**Meeting Content (minutes / recording / slides / other):**

| Date | Minutes |
|---|---|
| 27 August 2020 | |

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| 11 June 2020 | Call was recorded.<br><br> |
| 04 June 2020 | 1. Start with Adlik project on interop<br>a. document: https://docs.google.com/document/d/1_e7Ty9VvEXvgS-4YSuBbER8VA4_vnX6AtZE1bOw_Efc/edit?usp=sharing<br>b. Map new project to ML workflow stack |
| 07 May 2020 | 1. Kickstart of the interop work, identify top 1~3 use cases, champions that volunteer to lead the use case discussion, and milestones<br>a. document: https://docs.google.com/document/d/1_e7Ty9VvEXvgS-4YSuBbER8VA4_vnX6AtZE1bOw_Efc/edit?usp=sharing<br>b. Map new project to ML workflow stack |
| 09 Apr 2020 | Call was recorded, this is the record. And this is the chat.<br>• We agreed to change the name of the sub committee from ML Workflow Committee to ML Workflow & InterOp Committee (MWI)<br>◦ Zhipeng (Howard) Huang shared the slides of the InterOp Proposal and we agreed to move forward with the plan<br>◦ The first use case we agreed on will be Federated Learning<br>◦ We will create a slack channel for the MWI Committee<br>◦ Zhipeng (Howard) Huang will lead the WMI Committee from now on as Ofer Hermoni is stepping down |
| 12 Mar 2020 | • ML Workflow stack (updated deck):<br>◦ Ofer Hermoni shared the work was done off line with Marquez team to map it to the Data Consistency block<br>▪ Jnu Gu of Zilliz provided the mapping to the Serving box<br>◦ Interoperability proposal (see deck)<br>▪ Howard Huang of Huawei presented a proposal for interoperability between the different LFAI projects and also external projects<br>▪ We had a discussion if there is a need for a real interoperability effort or maybe a standard will be enough? We agreed that there is a need for a real interoperability effort<br>▪ Next steps:<br>• In the next ML Workflow meeting Howard will present a plan for the effort<br>• In one of the next TAC meetings Howard will share the proposal with the broader team |
| 13 Feb 2020 | Call was recorded, this is the record. And this is the chat.<br><br>In the meeting we covered the following:<br><br>• We reviewed the current version of the ML Workflow, and tried to identify the correct blocks for the two new projects (Milvus and Marquez)<br>◦ Jun of Zilliz will think about that for Milvus<br>▪ Ofer Hermoni will approach the WeWork team to identify the right location for Marquez<br>◦ Project integration:<br>▪ Natarajan Subramanian covered the status of the collaboration / integration between Acumos and Angel, and Acumos and Adlik. Due to the Corona epidemic everything is slowed down currently in China<br>▪ Natarajan Subramanian also mentioned the work Acumos is doing with AI360. Currently in discussions phase<br>◦ Jessica Kim shared the status of the integration infrastructure Huawei has in Hong Kong, and the plan to add more locations based on Tencent public cloud - both in China and Canada<br>◦ Jessica Kim suggested to leverage the integrations and the ML Workflow activity as part of the outreach activity |

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| 16 Jan 2020 | In this meeting we had a team from RedHat to present ODH (Open Data Hub)<br><br>• In this meeting we started recording our calls. The Zoom recording can be find here. The chat here<br>  ◦ Deck presented is available here<br>  ◦ Ofer Hermoni gave a background about the ML Workflow working group goals and activity<br>  ◦ Redhat team provided a presentation about ODH<br>  ◦ Apparently there are many overlaps between the two initiatives<br>  ◦ Next steps<br>  ▪ Invite the ODH team to present to the TAC<br>  ▪ A representative of the TAC will join one of the ODH meetings to present LFAI and ML Workflow |
| 05 Dec 2019 | Agenda for the meeting:<br><br>1. Update about the integration between Acumos and other LFAI projects - Angel and ONNX<br>2. Review the latest version of the ML Workflow slides and map<br>3. Discuss our focus going forward<br>Agenda for the meeting:<br><br>Minutes:<br><br>• We have now a dedicated mailing list, please make sure you register so you can get all the emails and invites<br>  ◦ Ofer Hermoni shortly explained to goals of the committee<br>  ◦ We mapped the new project Sparklyr on the ML stack, and updated the deck<br>  ◦ Natarajan Subramanian and Fitz Wang updated regarding the integration between Angel and Acumos - the technical teams are working together on the integration<br>  ◦ Natarajan Subramanian updated re the status of the integration between Acumos and ONNX. Jim Spohrer said he will dedicate more resources to help with that<br>  ◦ Logistics:<br>  ▪ Everyone should register to the mailing list in order to get the invites<br>  ▪ Meetings will be scheduled for once in 4 weeks on Thursdays 10am EST (immediately after the TAC call)<br>  ◦ We discussed the goals of this committee:<br>  ▪ The integration between the different projects will be done by the technical teams of the projects. This committee will support that and identify potential collaboration opportunities and identify resource gaps<br>  ◦ Jim Spohrer suggested to work with the Red Hat team on the Open Data Hub initiative. He will invite Sherard Griffin to talk in the next meeting<br>  ◦ Jim Spohrer encourages collaboration and integration to IBM AI Fairness framework, it will help to convince IBM to contribute this framework of projects to LFAI |
| 05 Sep 2019 | • Goals defined for the meeting:<br>  ◦ Reevaluate the ML Workflow stack according to feedback we got<br>  ▪ Work on integration between different LFAI projects<br>  ◦ Ofer Hermoni shared that there is a lot of interest from the community (LFAI members and the broader community), and many joined this effort, we have 18 people representing 8 companies!<br>  ◦ evaluate the ML Workflow stack (see here updated deck):<br>  ▪ Patrick Fu (from Gemini Open Cloud) shared their view on the ML Pipeline (see slide 2 on the deck), main difference was the data consistency layer - we added it to our stack<br>  ▪ Ofer Hermoni mentioned that Fitz Wang showed in OSS that Angel supports Feature Engineering as well - we added that to the stack<br>  ▪ Next step - update existing projects on the new stack<br>  ◦ Integration between different projects:<br>  ▪ Natarajan Subramanian shared with the team the work we are doing regarding the integration between Acumos and Angel and between Acumos and Horovod<br>  ▪ Next step - set a "1:1" session dedicated to the integration between Angel and Acumos (Thursday September 19th)<br>  ◦ More next steps<br>  ▪ Build a discussion section on the ML Workflow web page (brahim Haddad / Jacqueline Cardoso) |
| 03 Jun 2019 | • We farther refined the presentation and discussed next steps for this group<br>  ◦ IBM presented some of the internal work they are doing around AI open source |
| 23 May 2019 | • We discussed the different open source projects and mapped them to our stack. See the results here<br>  ◦ Next week Animesh will present a framework IBM is building and we will discuss how it can be beneficial to create collaboration between different LFAI projects<br>  ◦ We will also prepare content for the next TAC meeting in which we will review our progress |
| 16 May 2019 | • Animesh from IBM joined reviewed a deck with IBM AI open source activities (this slide that summarizes it) |
| 02 May 2019 | • We defined our goal, and started to review the stack. This is the result |

# Participants (archive as we moved to use the mailing list)

Committee Lead: Zhipeng Howard Huang Zhipeng (Howard) Huang

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