Meeting of the LF AI & Data Technical Advisory Council (TAC)

October 19, 2023

LF AI & DATA

Antitrust Policy

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Recording of Calls

Reminder:

TAC calls are recorded and available for viewing on the TAC Wiki

Reminder: LF AI & Data Useful Links

- Web site: lfaidata.foundation
- Wiki: wiki.lfaidata.foundation
- GitHub: github.com/lfaidata
- Landscape: https://landscape.lfaidata.foundation or https://l.lfaidata.foundation
- Mail Lists: https://lists.lfaidata.foundation
- Slack: https://slack.lfaidata.foundation
- Youtube: https://www.youtube.com/channel/UCfasaeqXJBCAJMNO9HcHfbA
- LF AI Logos: https://github.com/lfaidata/artwork/tree/master/lfaidata
- LF AI Presentation Template: https://drive.google.com/file/d/1eiDNJvXCqSZHT4Zk_-czASlz2GTBRZk2/view?usp=sharing

- Events Page on LF AI Website: https://lfaidata.foundation/events/
- Events Calendar on LF AI Wiki (subscribe available): https://wiki.lfaidata.foundation/pages/viewpage.action?pageId=12091544
- Event Wiki Pages: https://wiki.lfaidata.foundation/display/DL/LF+AI+Data+Foundation+Events

Agenda

- Roll Call (1 mins)
- Approval of Minutes from previous meeting (2 mins)
- Presentation proposal for the Interoperability Project and the TrustMark project (40 minutes) (Jon Stine)
- Open Discussion

TAC Voting Members - Please note

Please ensure that you do the following to facilitate smooth procedural quorum and voting processes:

- Change your Zoom display name to include your First/Last Name, Company/Project Represented
  - example: Nancy Rausch, SAS
- State your First/Last Name and Company/Project when submitting a motion
  - example: First motion, Nancy Rausch/SAS

TAC Voting Members

Note: we still need a few designated backups specified on wiki

Member Company or Graduated Project	Membership Level or Project Level	Voting Eligibility	Country	TAC Representative	Designated TAC Representative Alternates
4paradigm	Premier	Voting Member	China	Zhongyi Tan	
Amazon Web Services	Premier	Voting Member	USA		
Baidu	Premier	Voting Member	China	Jun Zhang	Daxiang Dong, Yanjun Ma
Ericsson	Premier	Voting Member	Sweden	Rani Yadav-Ranjan	
Huawei	Premier	Voting Member	China	Howard (Huang Zhipeng)	Charlotte (Xiaoman Hu), Leon (Hui Wang)
IBM	Premier	Voting Member	USA	Susan Malaika	Beat Buesser, Alexandre Eichenberger
Nokia	Premier	Voting Member	Finland	@Michael Rooke	@Jonne Soininen
OPPO	Premier	Voting Member	China	Jimmy (Hongmin Xu)	
SAS	Premier	Voting Member	USA	*Nancy Rausch	Liz McIntosh
ZTE	Premier	Voting Member	China	Wei Meng	Liya Yuan
Adversarial Robustness Toolbox Project	Graduated Technical Project	Voting Member	USA	Beat Buesser	Kevin Eykholt
Angel Project	Graduated Technical Project	Voting Member	China	Jun Yao	
Egeria Project	Graduated Technical Project	Voting Member	UK	Mandy Chessell	Nigel Jones, David Radley, Maryna Strelchuk, Ljupcho Palashevski, Chris Grote
Flyte Project	Graduated Technical Project	Voting Member	USA	Ketan Umare	
Horovod Project	Graduated Technical Project	Voting Member	USA	Travis Addair	
Milvus Project	Graduated Technical Project	Voting Member	China	Xiaofan Luan	Jun Gu
ONNX Project	Graduated Technical Project	Voting Member	USA	Alexandre Eichenberger	Andreas Fehlner, Prasanth Pulavarthi, Jim Spohrer
Pyro Project	Graduated Technical Project	Voting Member	USA	Fritz Obermeyer	
Open Lineage Project	Graduated Technical Project	Voting Member	USA	Julien Le Dem	Michael Robinson, Mandy Chessell
Marquez Project	Graduated Technical Project	Voting Member	USA	Willy Lulciuc	TBD

Minutes approval

LF AI & DATA

Approval of October 5, 2023 Minutes

Draft minutes from the October 5 TAC call were previously distributed to the TAC members via the mailing list

Proposed Resolution:

- That the minutes of the October 5 meeting of the Technical Advisory Council of the LF AI & Data Foundation are hereby approved.

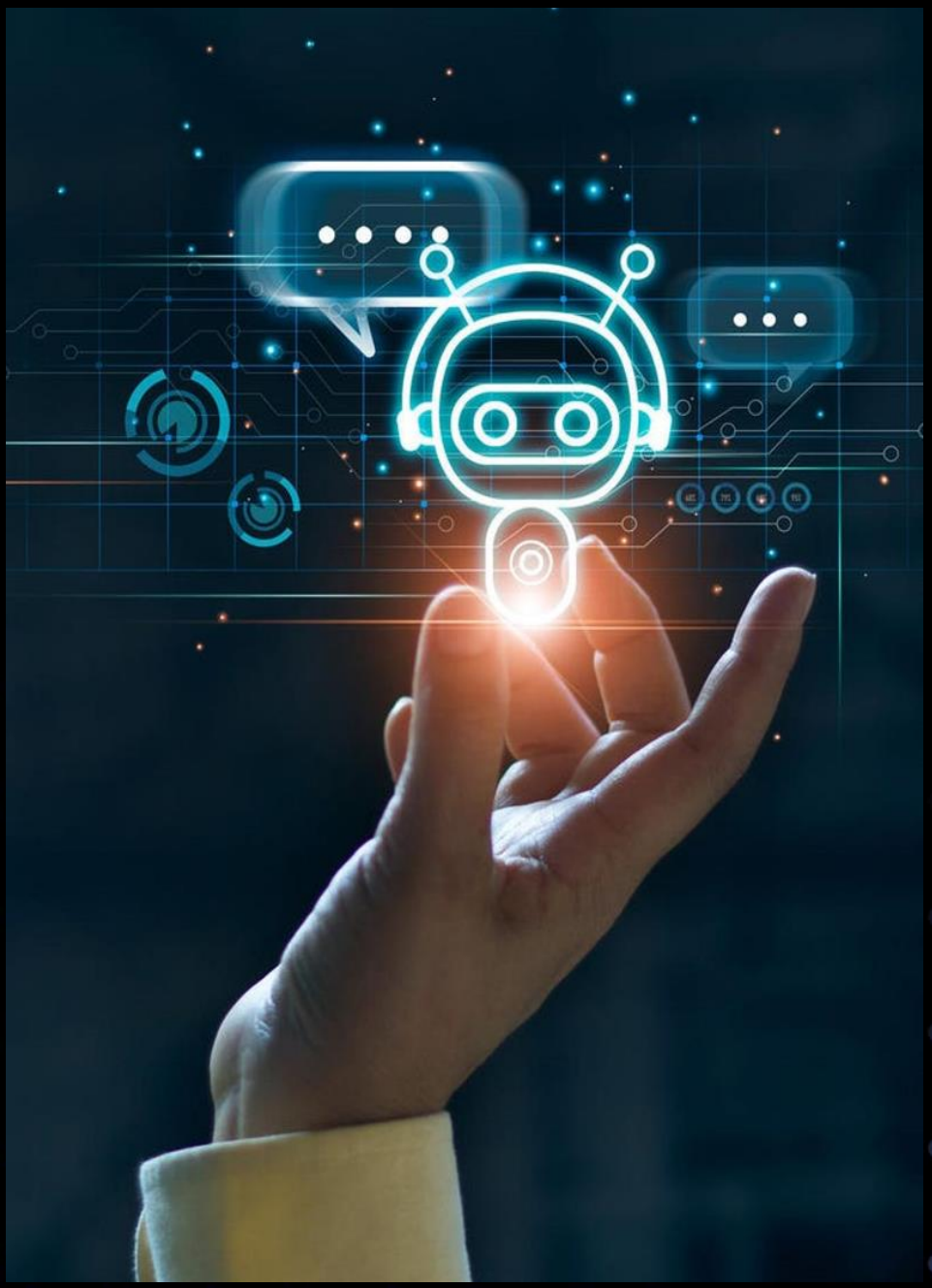


Image: ZDNet

PROPOSAL TO INCUBATE INTEROPERABILITY PROJECT AND TRUSTMARK PROJECT IN LF AI & DATA

Oct 19, 2023
Presentation to the LF AI & Data TAC
Jon Stine

Proposed:

Application for LF AI & Data Foundation to accept as incubation projects two active, achieving projects / initiatives from the LF Open Voice Network (OVON).

HISTORY

Projects born of 2017-2018 MIT-Intel-Capgemini research.

OVON founded 2020 as LF Community to "make voice worthy of user trust" and "work like the web."

Today, it would be "Open Conversational AI Network." *Working at the intersection of natural language and generative AI.*

THE PROJECTS

(1) Interoperability: define, develop, demonstrate, scale a **Universal API** for conversational assistance.

(2) TrustMark Initiative: translate ethical principles specific to conversational AI into **action and risk mitigation** for developers, enterprise users – principles, **LF EdX education**, maturity model, specifications.

Project:
Interoperability of Conversational Assistants

LF AI & DATA | OPEN VOICE NETWORK

Now in development

The "Message Envelope," a universal, open API for voice/chatbot and language model interoperability, analogous to HTTP AND HTML.

Software specifications, tools to enable the full delegation of voice/chat dialogs to other browsers and assistants regardless of their hosting ecosystem.

- Multiple open-source specifications
- Development sandbox(es)
- Libraries (Python, Java, Node.js, Javascript, Java/Rust, Objective C/Swift, others)
- Open-source destination registry

The Message Envelope: Major Components

The Open, Universal API for Interoperable Conversational Assistance

LF AI & DATA | OPEN VOICE NETWORK

September 2023

The Message Envelope

- Contains information for setting up an interaction between conversational assistants
- Identifies sender and receiver
- Forwards any relevant conversational context to another assistant, including the expected pattern of interaction (delegation, channeling or mediation)
- Schema location and version

https://github.com/open-voice-network/lib-interop

The Dialog Event

- Represents linguistic communication between two conversational participants in the form of audio, text, or interpreted semantics
- Describes what each participant said
- Typically, this is assistant-to-human communication

https://openvoicenetwork.org/docs/interoperable-dialog-event-object-specification-version-1-0/

Trustworthy Conversational AI

- Cross-system data privacy and security
- Assistant identification and metadata
- Destination and content findability and discovery
- Assistant-to-assistant authentication

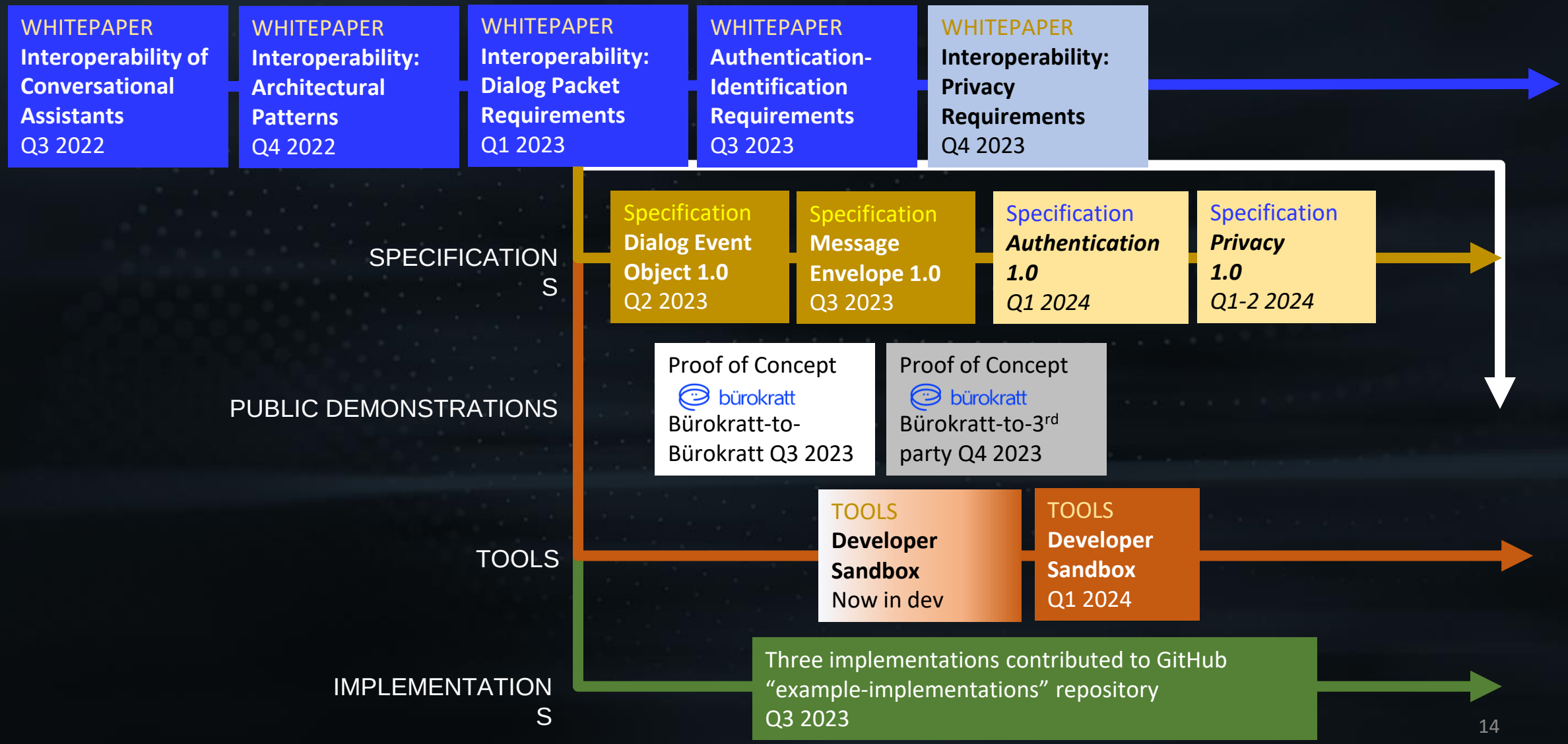
Requirements, specifications under development
https://openvoicenetwork.org/docs

A Message Envelope may contain one or more Dialog Events

High-Level Roadmap: Interoperability

Through Q1 2024, as of 2023.10.03

LF AI & DATA | OPEN VOICE NETWORK



Opportunities: LF AI & Data Synergies For Interoperability Project

LF AI & DATA | OPEN VOICE NETWORK

GRADUATED

EGERIA

- Location and discovery interop services

Adversarial Robustness Toolkit

- Security standards
- Tools

ONNX

- Best practices for Interoperability standards

POTENTIAL SYNERGIES

Models Workstream
AI Frameworks Workstream
Education/Outreach Workstream

GENERATIVE AI COMMONS

INCUBATING

DELTA
a deep learning language technology platform

25+ other opportunities for development and growth within the open NLP ecosystem

Current Contributors / Participants in the Interoperability Project

LF AI & DATA | OPEN VOICE NETWORK

talkmap Conversational Intelligence

ejTalk

xcally™

CONVERSATIONAL TECHNOLOGIES

42 WOLFSBURG

mw

AEBIS

PBS

HUEX

WHOELSE

KAIZEN VOIZ
simple · seamless · secure

Republic of Estonia
Information System Authority

SCHWARZ
LIDL
Kaufland
SCHWARZ Produktion
prezero

CUNY THE CITY UNIVERSITY OF NEW YORK

Stanford: 21-2022 collaboration

Stanford Open Virtual Assistant Lab

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Project:

The TrustMark Initiative

LF AI & DATA | OPEN VOICE NETWORK

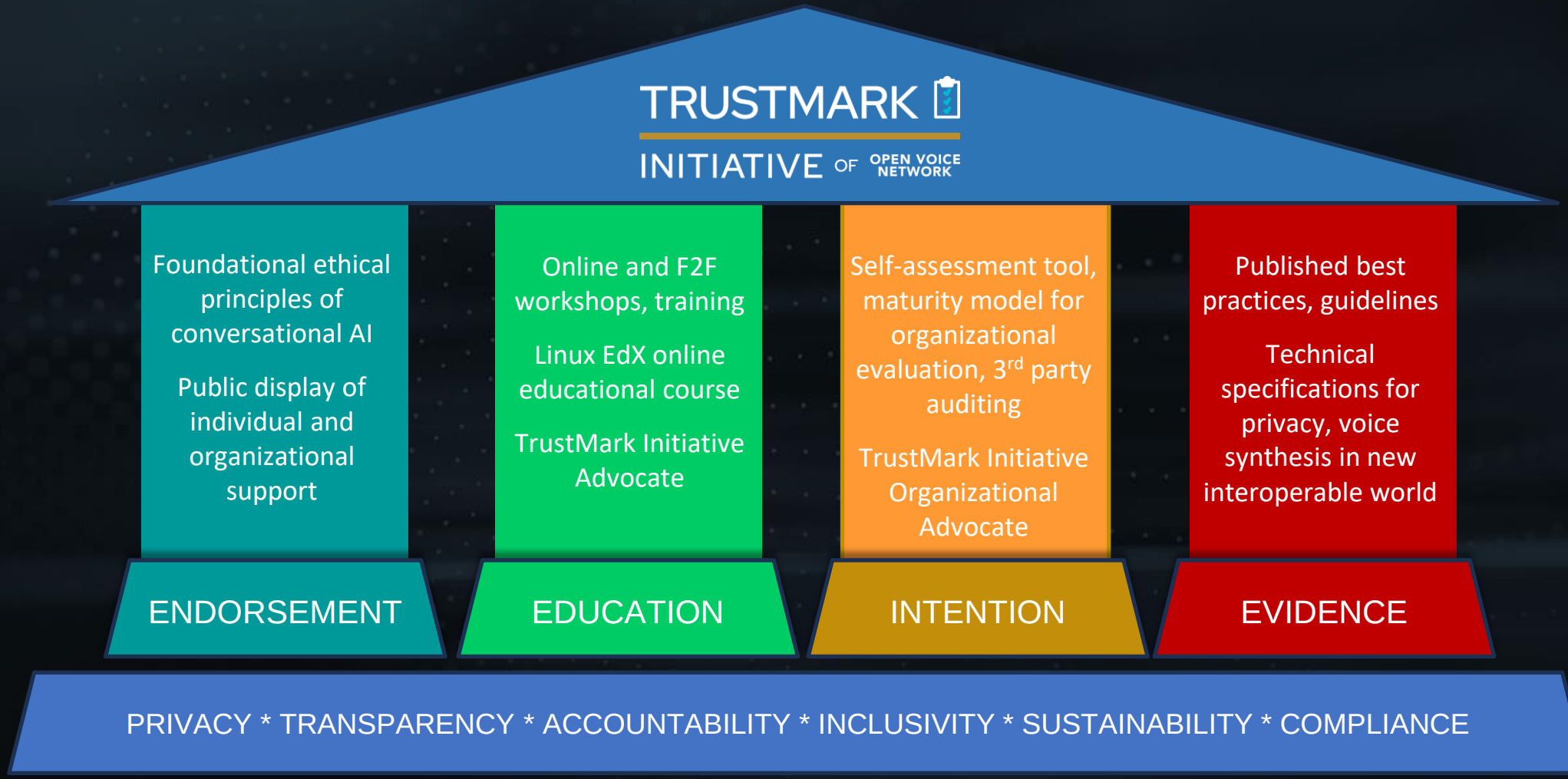
Translation of ethical principles into action – focused on conversational AI

For developers and enterprise users, tangible steps to legal and ethical **risk mitigation**

- Built from study of extant AI ethics literature, existing regulations and guidelines (including GDPR, EDPB Voice, NIST, draft EU Artificial Intelligence Act)
- Identification, tech-specific definitions in foundational papers: ethical use, privacy, security, synthetic voice
- **Now: online educational course via LF EdX**
- **Next: organizational self-assessment tool this month**
- On the roadmap: privacy, security, voice synthesis, ethical requirements for interoperability; libraries-tools

For the new world of natural language / generative AI

The Strategic Pillars of the TrustMark Initiative



High-Level Roadmap: TrustMark Initiative

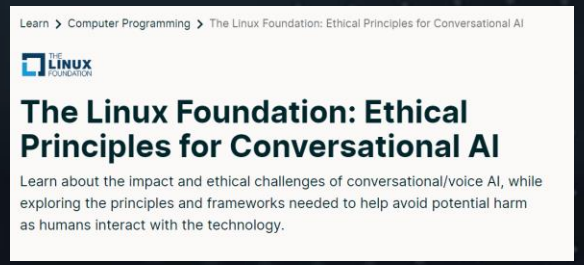
Through Q1 2024, as of 2023.10.03

LF AI & DATA | OPEN VOICE NETWORK

	2023 Q2-3	2023 Q4	2024 Q1	2024 Q2
ENDORSEMENT	• TrustMark individual and organizational endorsements • Initial organizational review of program, tools. Private feedback, endorsement	• TrustMark marketing plan created	• **Corporate-organizational endorsement** • **First TrustMark case study published (Jan)**	
EDUCATION	• **Launch of TrustMark LF EdX course "Ethical Principles for Conversational AI"** • Risk Mitigation Workshop, Voice & AI Conf, Washington	• Updated ethical guidelines published (Nov) • Course outline for 2nd TrustMark training course (Dec)	• **2nd TrustMark EdX training course completed (Mar)**	
INTENTION	• Self-Assessment Tool: conceptual draft, outline	• **TrustMark Self-Assessment Tool released (Oct)**	• **Self-Assessment Tool localized for global audience (Feb)** • Self-Assessment Tool updated for specific guidance (Mar)	
EVIDENCE	• Study, review (Q3): EU AIA, NIST, generative AI today-tomorrow	• **Privacy and Security requirements for the "message envelope" outlined (Dec)**	• Privacy and Security standards for the "message envelope" published (Mar)	

Industry Influence, Education, and Advocacy

Linux EdX Course



Public & Private Comment

European Union Data Protection Board

Digital Advisory Staff, Office of the President, European Union

Federal Trade Commission

Federal Communications Commission

The Bill & Melinda Gates Foundation Voice Tech Symposium

15 March 2023 / Seattle

Oita Coleman leading the session on consent, transparency and trust.

HIMMS 2023 Chicago

The ethical issues of conversational AI for health and wellness

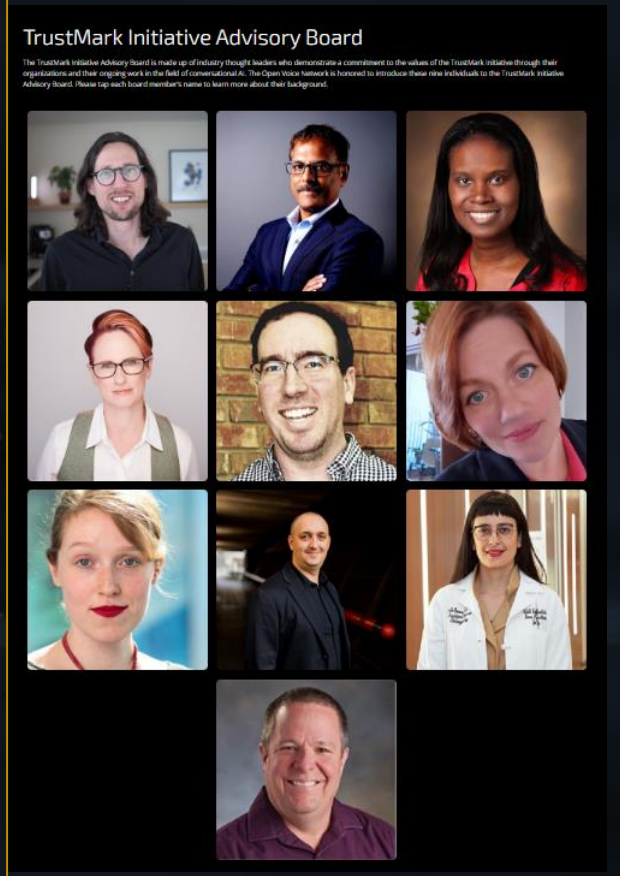
Project Voice 2023 Chattanooga

Conversational AI Leadership Council

Voice & AI 2023 Washington, D.C.

Legal & Ethical Risk Mitigation for the new world of Conversational AI

Global Expert Advisors



Opportunities: LF AI & Data Synergies For TrustMark Initiative Project

LF AI & DATA | OPEN VOICE NETWORK

GRADUATED

Adversarial Robustness Toolkit

- Security standards
- Tools

INCUBATING

AI Explainability 360

AI Fairness 360

25+ projects in open-source NLP ecosystem; all opportunities for development and growth.

SYNERGIES

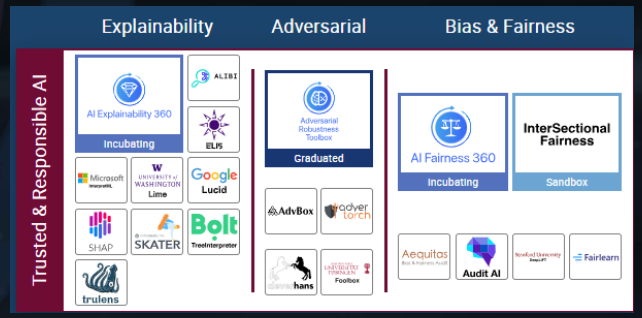
AI Frameworks Workstream

Education/Outreach Workstream

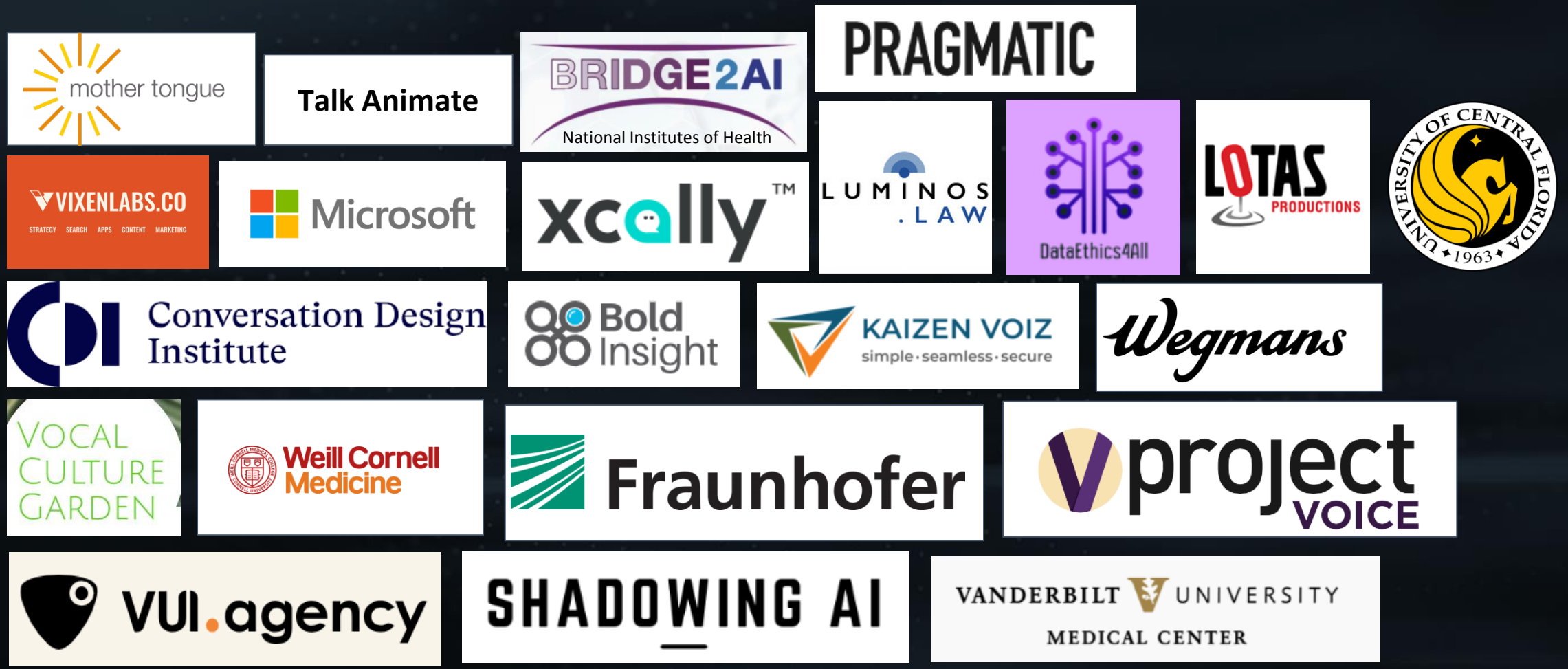
LAUNCHING

GENERATIVE AI COMMONS

21+ other projects in Trusted & Responsible AI open ecosystem



Current Contributors / Participants in the TrustMark Initiative Project



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There is an incredible level of alignment between these two projects and LF AI & Data hosted project and the recently announced Generative AI Commons.

Looking forward to joining the LF AI & Data community and creating new collaborations with existing projects and driving open source AI innovation specific to Voice technologies.

Requesting Your Support

To vote in favor of hosting the Interoperability Project and TrustMark Project as Incubation Projects in LF AI & Data.

With a positive vote, existing members of OVN will join LF AI & Data as board members:

Microsoft SCHWARZ VERITONE Wegmans

LF AI & DATA OPEN VOICE NETWORK

Thank you

Proposed Resolution

Proposed Resolution:

- The LF AI & Data TAC approves the hosting of the Interoperability Project as an Incubation project.

Proposed Resolution

Proposed Resolution:

- The LF AI & Data TAC approves the hosting of the TrustMark Project as an Incubation project.

Upcoming TAC Meetings

- November 2 – MetisFL – tentative
- November 16 – Jina AI new Incubation Project

Please note we are always open to special topics as well.

If you have a topic idea or agenda item, please send agenda topic requests to tac-general@lists.lfaidata.foundation

Open Discussion

LF AI & DATA

TAC Meeting Details

- To subscribe to the TAC Group Calendar, visit the wiki: https://wiki.lfaidata.foundation/x/cQB2 _____
- Join from PC, Mac, Linux, iOS or Android: https://zoom.us/j/430697670
- Or iPhone one-tap:
  - US: +16465588656,,430697670# or +16699006833,,430697670#
- Or Telephone:
  - Dial(for higher quality, dial a number based on your current location):
  - US: +1 646 558 8656 or +1 669 900 6833 or +1 855 880 1246 (Toll Free) or +1 877 369 0926 (Toll Free)
- Meeting ID: 430 697 670
- International numbers available: https://zoom.us/u/achYtcw7uN

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