

AI & Metaverse Technology Task Force

The AI & Metaverse Technology Task Force (AIM TF) is an approved task force of the ToIP [Technology Stack Working Group](#) (TSWG).

Mission

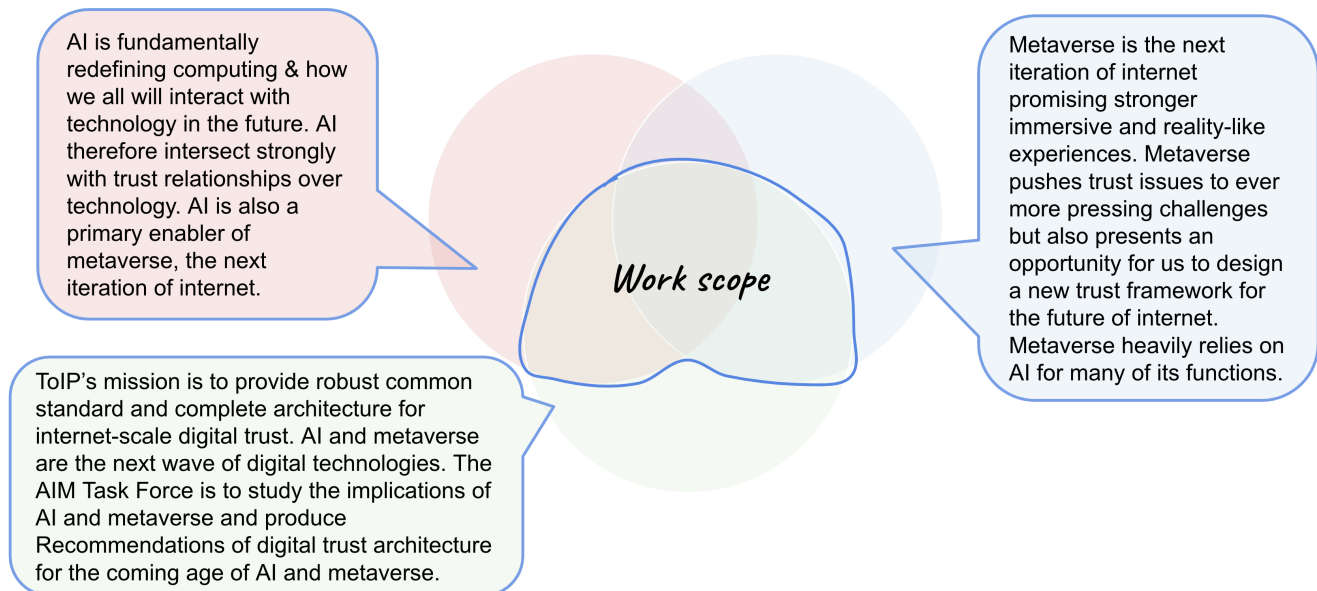
The mission of TSWG AI & Metaverse Technology Task Force (AIM TF) is to create recommendations for the ToIP community to address opportunities and challenges brought on by advances in AI, Metaverse and related technologies within the overarching ToIP mission of creating interoperable trust over the Internet.

- In one aspect, AI technologies may break the traditional assumptions of digital systems design, even most of the SSI systems or other decentralized systems.
- In another aspect, AR/VR/XR/Metaverse, combined with AI, may fundamentally alter/blur/erase the boundaries between digital and the real world. After all, you face is your identity, whether you choose it or not, and anyone can create that implied identity without your permission or even knowledge. Once it is in a system, it has a life of its own. It is something missing today but critically important if we want our solutions be useful in the next 5-10 years.
- Metaverse and web3 are two intertwined drivers in pushing many trust related issues and technologies to the forefront of defining what is the next internet or the next web.
- AI technology raises critical ethical issues with regard to how we think about trust over the internet, e.g. fairness, privacy and accountability. All these aspects, and more generally, AI ethics and harm prevention, point to the importance and relevance of the intersection between Trust and AI.
- Other topics:
 - Trustworthiness of data
 - How the AIs work with each other
 - How does a person determine trustworthiness "on the fly"
 - More to be explored at the beginning of the Task Force's work

Some of these themes were also discussed in the Internet Identity Workshop (IIW'34) April 26-28, 2022, in a talk given by [Wenjing Chu](#) "Identity in the Age of AI".

A Venn diagram conveniently outlines the scope of the Task Force's work.

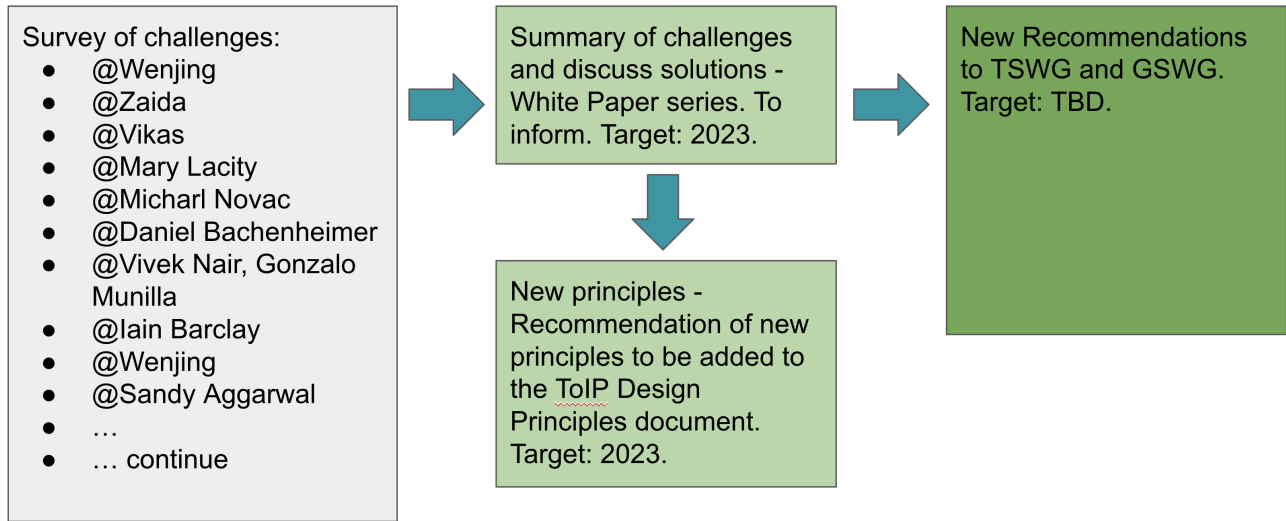
Venn Diagram of AIM Task Force's work scope



The mission of this task force is to identify the issues brought on by these technology developments and provide a recommendation for a roadmap of future work in ToIP. We plan to accomplish this in two phases:

- The first phase is exploratory: to conduct survey studies to come to a common understanding of how the technologies of AI/Metaverse and Trust intersect & impact ToIP's current [mission](#). The output can be one or more [White Papers](#).
- The second phase is to synthesize an actionable [Recommendation and/or White Papers](#) for ToIP.

The two phases should not be seen as strictly serial of course. They will overlap as the Task Force feel ready to produce deliverables in some topics while continuing in exploring new areas. The following diagram illustrates the Task Force's work roadmap (reviewed in Dec 2022 and Jan 2023).



AIM Task Force 2023 Planning

Speakers Series

Our survey, introduction, discussion, and other exploratory work is organized as a series of speakers. The current list of speakers and the link to the meetings where they presented are listed in the table below. We invite all who have interest in presenting a topic related to the Task Force's work please be in contact with the Co-Chairs [Anita Rao](#) and/or [Wenjing Chu](#).

No.	Speakers	Date	Topic	Link to Minutes & Recordings	Notes
1	Wenjing Chu , Futurewei	July 21, 2022	What is AI? What is Metaverse? How Do They Intersection with Trust?	2022-07-21 AIM TF Meeting Notes	The top of the meeting notes contains link to Zoom Recording
2	Zaïda Rivai , Danutech	August 4, 2022	Issues in AI & Metaverse	2022-08-04 AIM TF Meeting Notes	
3	Mary Lacity , Uni. of Arkansas - Walton	August 18, 2022	SSI Principles - Do we need to revisit for AI and metaverse?	2022-08-18 AIM TF Meeting Notes	Mary did not use a title - I added the topic here from her last slide in the deck - noted by Wenjing Chu
4	Daniel Bachenheimer , Accenture	Sept 1, 2022	On Biometrics	2022-09-01 AIM TF Meeting Notes	
7	Vivek Nair and Gonzalo Munilla, UC Berkeley & TU Munich	Sept 15, 2022	Privacy in the Metaverse	2022-09-15 AIM TF Meeting Notes	
8	Iain Barclay , Cardiff U.	Sept 29, 2022	Verifiable Oversight on AI Systems	2022-09-29 AIM TF Meeting Notes	
9	Wenjing Chu , Futurewei	Oct 13, 2022	How AI & Metaverse Intersect with the ToIP Stack? New Design Principles for the ToIP Stack	2022-10-13 AIM TF Meeting Notes	
10	Sandy Aggarwal	Nov 10, 2022 & Dec 1, 2022	Metaverse - Identity & Data Privacy	2022-11-10 AIM TF Meeting Notes 2022-12-01 AIM TF Meeting Notes	

11	Wenjing Chu , Futurewei	April 13, 2023	The Latest Generative AI, Authentication and Content Authenticity	2023-04-13 AIM TF Meeting Notes	
12	Daniel Bachenheimer Wenjing Chu	April 27, 2023	IIW Update: DeepFake, Biometrics, Liveness, OTP, & Wallet	2023-04-27 AIM TF Meeting Notes	
13	Wenjing Chu	May 25, 2023	Northern Block's Mathieu Interviews Wenjing Chu: Digital Trust in the Age of Generative AI	2023-05-25 AIM TF Meeting Notes	

Deliverables

The deliverables for this Task Force are:

- A survey study report, or a series of reports (White Papers)
- A series of Recommendations or White Papers (or Blogs & other lighter formats)

The following table lists all active white paper (and other formats of reports) currently in progress. We invite more Task Force members to propose new deliverables and/or join any of the current work.

No.	Primary Authors	Title	Format & Link to the Working Draft	Expected publication date	Notes
1	Phil Wolff	Let's imagine a ToIP landscape vastly enhanced by pervasive AI	Single blog post 2023-03-30 AIM TF Meeting Notes	Paused	Phil Wolff is pausing this work
2	Wenjing Chu	Digital Trust in the Age of ChatGPT	White paper 2023-03-30 AIM TF Meeting Notes	~ July 2023	
3	Sandy Aggarwal	Identity and Payments in Gaming	White paper 2023-03-30 AIM TF Meeting Notes	TBD	Links to a Hyperledger work
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Leads

Please add your name to this list if you wish to be a lead:

- [Wenjing Chu](#), Futurewei
- [Anita Rao](#)

Note Anita Rao joined the Task Force as a Co-Chair on the June 8 meeting and Vikas Malhotra stepped down - Thanks Vikas [Vikas Malhotra](#) for all past contributions

Membership and Joining

Prior to participating in the meetings please ensure that you are a member of the Trust Over IP Foundation. Contributor level membership is available to anyone at no cost. Details can be found at [this link](#).

To join this TF, add your name to this list (along with your affiliation if your organization is a ToIP member):

- [Wenjing Chu](#) , Futurewei
- [Vikas Malhotra](#), WOPLLI Technologies
- [Phil Wolff](#)
- [John Phillips](#)
- [Burak Serdar](#)
- [sankarshan](#)
- [Drummond Reed](#), Gen
- [Zaïda Rivai](#), Danube Tech Gmbh
- [Gwen Pfetsch](#), Microsoft

- Shannon Wells
- [Nuttawut Kongsuwan](#), Finema
- [Sumabala Nair](#)
- [Pratyaksh Gupta](#)
- [Vladimir Simjanoski](#), Blokverse
- [Mattia Zago](#)– Monokee
- Callum Haslam, BC Gov
- [Jacques Bikoundou](#)
- [Darrell O'Donnell](#)
- [Eric Drury](#)
- [Vinod Panicker](#) , Wipro
- [Vlad Zubenko](#)
- [Gordon Jones](#) - Validide Corp
- [Sandy Aggarwal](#)
- [Iain Barclay](#)
- [RJ Reiser](#)
- [Mary Lacity](#)
- [Malcolm Sloan](#)
- Chi Hwa Tang - Mixx Reality
- [Anita Rao](#)
- [Daniel Bachenheimer](#)

Meeting Schedule

This group meets on a biweekly basis every other Thursday at 12:00 PM Eastern / 9:00 AM Pacific Time.

- Next Scheduled Meeting: Jan 19, 2023 (Thursday), 9 AM, Pacific Time
- Zoom: <https://zoom.us/j/98931559152?pwd=d0ZwM1JHd3d5cXRqVTU4NlRHeVJvQT09>

Please refer to the previous meeting minutes as well as agenda for the upcoming meeting [here](#).

Slack

Our Slack channel is **#tswg-aim-tf**. Please join us there: <https://trustoverip.slack.com/archives/C03G3S7BH8U>

Milestones

Key milestones will include, but are not limited to:

1. **Phase 1: Survey and White Paper**
2. **Phase 2: Recommendations and/or White Papers**

Intellectual Property Rights (Copyright, Patent, Source Code)

As a Task Force (TF) of the Technology Stack WG (TSWG), the AIMTTF inherits the IPR terms from the TSWG [JDF Charter](#).

- Copyright mode: **OWFa 1.0** (available at <https://www.openwebfoundation.org/the-agreements/the-owf-1-0-agreements-granted-claims/owfa-1-0>)
- Patent mode: **OWFa 1.0** (available at <https://www.openwebfoundation.org/the-agreements/the-owf-1-0-agreements-granted-claims/owfa-1-0>)
- Source code: **Apache 2.0** (available at <http://www.apache.org/licenses/LICENSE-2.0.html>)
- The AIMTTF is not expected to produce source code.

Mailing List and Communications

This task force uses the following for communications

- **Mailing List:** No separate mailing list at present (one can always be added if needed).
- **Slack:** This TF has its own dedicated Slack channel **#tswg-aim-tf**: <https://trustoverip.slack.com/archives/C03G3S7BH8U>