

Workshop ID: P4

Title:

Value-Oriented Metaverse: Designing a Human-centric Future with Legal, Ethical and User-centric Perspectives

1) Short description of the workshop:

The workshop aims for a holistic perspective on the metaverse, understood as meshed extended reality (XR) worlds that interact with traditional information systems. These digital worlds integrate various technologies, such as AR, VR, blockchain, cryptocurrency, and social media. The metaverse enables an immersive and interactive virtual experience for users in a decentralized environment. XR devices, such as headsets, glasses, or gloves, allow users to see, hear, touch, and manipulate virtual objects and environments, as well as communicate and collaborate with other users.

These new immersive and interactive experiences, however, come with not only opportunities but also challenges and risks that we do not find in traditional IT systems. These new challenges ask us to explore avenues for future research. To understand the state of research and to develop a research agenda, we aim for a systematic assessment of the realization of values within the metaverse and value-driven design for the metaverse. Thus, we strive for diverse inputs from the participants regarding, i.e., privacy, inclusion, bias, and practices or patterns used in the metaverse.

Topics include but are not limited to:

- Privacy and Security: How can we facilitate privacy in the metaverse and prevent cyber threats and data misuse?
- Explainability and Transparency: How can information processing and sharing be made transparent to users? How does meshing up different technologies influence perception, trust, and understanding of the metaverse?
- Inclusion: How can the metaverse be made accessible to a broad audience in a way that supports diversity and equal opportunities? What are the potentials for enriched social interactions for people with disabilities? If and how can the metaverse drive prosperity in developing countries?
- Bias: How can we address bias in the metaverse? How can we ensure diversity while societies in tension strive for stereotypes?
- Practices and Patterns: What practices and patterns are used in the development, design, and use of the metaverse? Does value-driven design need to be adapted for the metaverse?

2) Detailed description:

Workshop Organizers

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The workshop aims for a holistic perspective on the metaverse, understood as meshed extended reality (XR) worlds that interact with traditional information systems. In other words, the metaverse describes a digital world that integrates various technologies, such as AR, VR, blockchain, and cryptocurrency, as

well as elements of social media. The metaverse enables an immersive and interactive virtual experience for users in a decentralized environment. XR is a key component of the metaverse, as it provides the means for users to access and interact with the digital world in a realistic and engaging way. XR devices, such as headsets, glasses, or gloves, allow users to see, hear, touch, and manipulate virtual objects and environments, as well as communicate and collaborate with other users.

These new immersive and interactive experiences, however, come with not only opportunities but also challenges and risks that we do not find in traditional IT systems. These new challenges ask us to explore avenues for future research. To understand the state of research and to develop a research agenda, we aim for a systematic assessment of the realization of values within the metaverse and value-driven design for the metaverse. Thus, we strive for diverse inputs from the participants regarding, i.e., privacy, inclusion, bias, and practices or patterns used in the metaverse.

Topics include but are not limited to:

- **Privacy and Security:** How can we facilitate privacy in the metaverse and prevent cyber threats and data misuse?
- **Explainability and Transparency:** How can information processing and sharing be made transparent to users? How does meshing up different technologies influence perception, trust, and understanding of the metaverse?
- **Inclusion:** How can the metaverse be made accessible to a broad audience in a way that supports diversity and equal opportunities? What are the potentials for enriched social interactions for people with disabilities? If and how can the metaverse drive prosperity in developing countries?
- **Bias:** How can we address bias in the metaverse? How can we ensure diversity while societies in tension strive for stereotypes?
- **Practices and Patterns:** What practices and patterns are used in the development, design, and use of the metaverse? Does value-driven design need to be adapted for the metaverse?

Workshop format:

- **Duration:** Half-day
- **Schedule:** The workshop is split into a short introduction to the general topic and several – previously submitted and editorially reviewed – short inputs on perspectives. Main part are breakouts (world cafe) to discuss the perspectives and to identify blind/under-researched areas. The workshop concludes with presentations of the results and a discussion of avenues to proceed with the results.
- **Format:** Our workshop has an interactive format based on presentations, discussions, and a collaborative element. Therefore, each participant must prepare a presentation based on the submitted paper covering the motivation, method, key findings (if applicable), and (expected) contributions (10-15 minutes). Our collaborative workshop is designed to develop a research agenda.

Prerequisite: Participants are required to submit either a full paper or short paper (according to the ECIS guidelines), or alternatively a position statement (max. 1 page) prior to the workshop as basis for the joint working session. Paper submission deadline is 27th May 2024. Papers need to be submitted to the workshop organizers via e-mail.

We welcome every participant who has experience in research on virtual worlds, the metaverse, and especially on the design of XR worlds. We especially welcome researchers who focus on SIG HCI contexts involving ethics, privacy, inclusion, and service aspects. We would offer our workshop in a hybrid format if needed.

3) Details on workshop chairs and contact emails:

Martin Semmann, martin.semmann@uni-hamburg.de

Julia Bräker, julia.braeker@uni-hamburg.de (contact person)

Sofia Schöbel, sofia.schoebel@uni-osnabrueck.de

4) Submission link\site\email:

Papers need to be submitted to the workshop organizers via e-mail.