THE UNIVERSE SYSTEM

Exploring possibilities for the metaverse in Higher Education environments

Vigo, 15th of June, 2023

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Chronology

- **[May 2022]** Public call from the Xunta de Galicia for the virtualization of laboratories.
- **[July 2022]** Approval of the proposal to create our own metaverse.
- **[Since September 2022]** Brainstorming in faculties and schools of the University of Vigo.
- **[Since October 2022]** Implementation and integration at the hands of two companies from Vigo.
  - Këndra
  - Deicom Technologies
- **[January 2023]** Joint project proposal with the University of Granada for the National R+D+i Plan to investigate uses and ethical risks.

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Motivation

- Apparently mature technology... waiting for use cases.

- Opportunity to guide early adoption based on social interest, not just market forces.

- A still incipient field of research.

- Perceived limitations in the transition towards forms of teaching that are increasingly decoupled in time and space.

Key words

- Presence
- Persistence
- Perception
- Community
- Usefulness
- Added value
- Flexibility
- internationalization
- interdisciplinarity

"The corporeity of the Internet"

Bits for a definition

- A shared and persistent virtual environment, where people can meet and enjoy increased interactions, doing things that would not be possible (or would be more difficult to achieve) in the real world.

- Accessible through different means and used for different purposes: work, entertainment, education, culture, tourism, …

- More or less immersive experiences, from simple voice-based interactions to sophisticated and fully immersive virtual reality experiences.
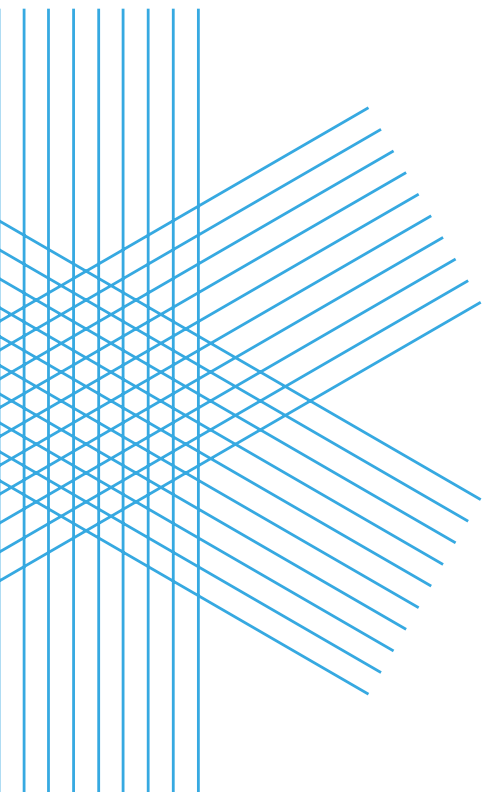
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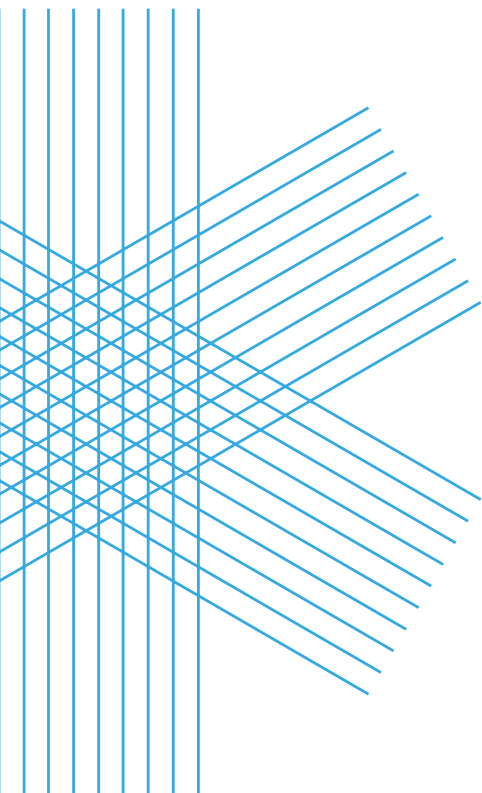
Priorities in the design of UVIGO's UNIverse

- Not building a "digital twin" of the University, but a complementary tool that we must learn to use. It will take time.
  - Progressive opening
  - Organic growth

- Find useful evidence in different areas.
  - Participation of schools and faculties in the technological, scientific, humanistic and legal-social fields.

- Offer an environment for experimentation for teachers, researchers and students.

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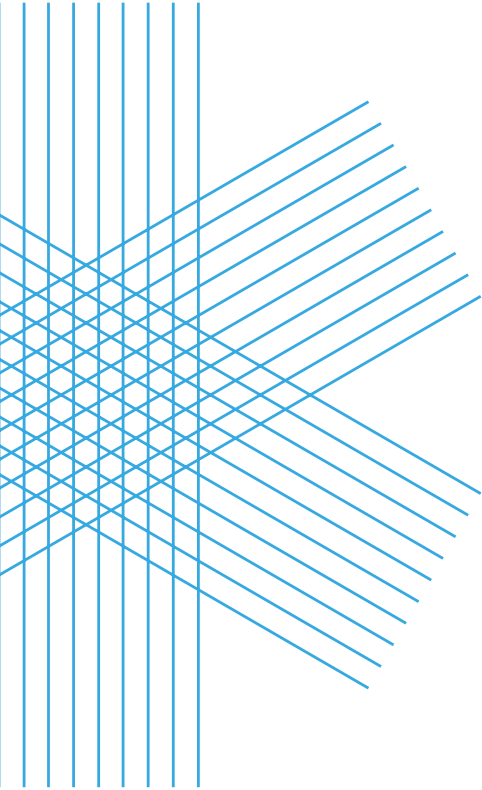
A natural environment for AI

- Possible roles for Artificial Intelligence in the metaverse:

    - Create/inject/mobilise content and activities in the virtual environment.

    - Help navigate the environment based on the interests, preferences and needs of each one.

    - Monitor if the interactions degenerate into violence, harassment, misinformation, etc.

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Some snapshots