

KOBI 3.0 A KNOWLEDGE ECOSYSTEM FOR CREATIVITY RESEARCH AND DESIGN

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Abstract

KOBI 3.0 is an innovative system for **learning** and **creativity**, designed with students, artists, and designers in mind.

By integrating artificial intelligence with augmented reality technologies, KOBI 3.0 offers a deeply immersive and dynamic user experience.

Thanks to multilingual support, it ensures exploration, ideation, and content creation for a global community of users.

Conversational AI for Creativity

KOBI 3.0 enables voice interactions with Chat GPT, creating a natural and dynamic brainstorming environment.

- **Generate Ideas:** Dialogue with the artificial intelligence in KOBI simplifies the ideation phase. Artists, students, and designers can explore with greater ease specialistic resources such as Research Catalogue. They can also use their voice for thematic conversations with Chat GPT.
- **Content Creation:** Designers and educators are not just content consumers. By collaborating with the artificial intelligence in KOBI3, they can co-create new works, ensuring they are both relevant and innovative.

A Universe of Knowledge

Knowledge Structure: Contents, key terms, and concepts are arranged like galaxies and planetary systems.

Semantic Exploration: Their placement and relationship are determined by semantic ties, making it easier for users to access and navigate vast knowledge spaces, organized by theme.

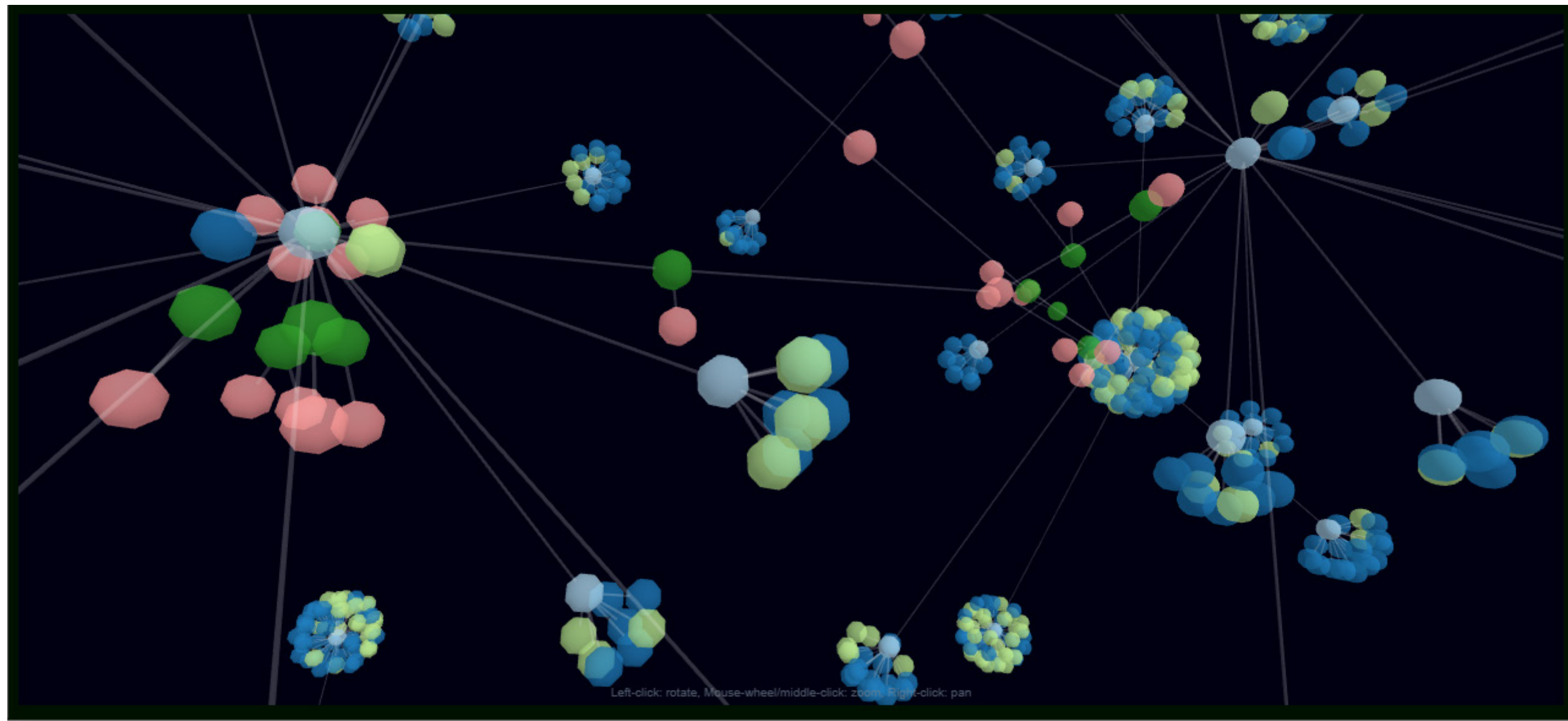
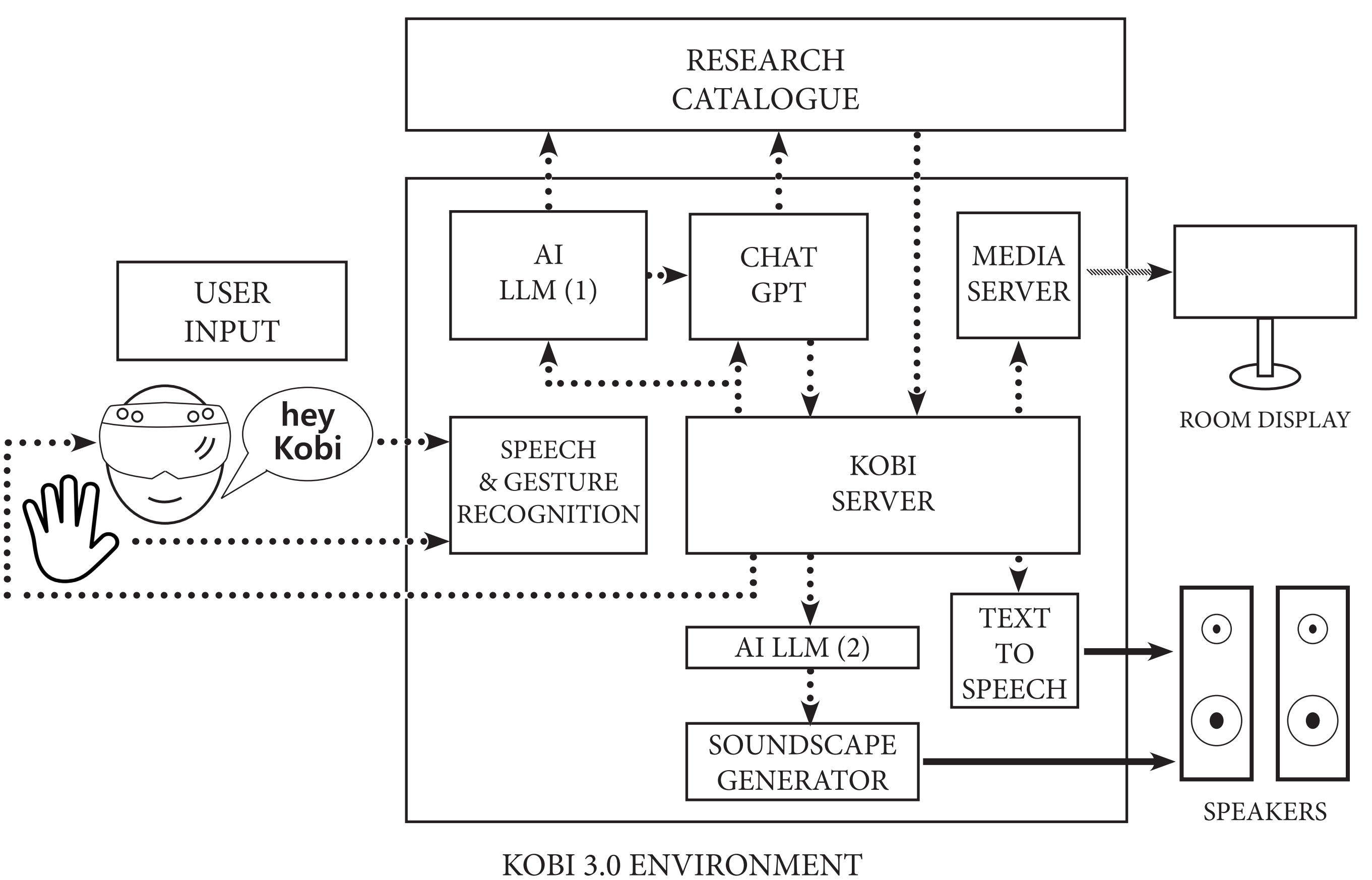


Fig. 1: View of the Knowledge Universe

System Diagram



LLM (1 & 2): large language artificial intelligence model

text>
images and video >>>
audio >>>

Fig. 2: Interaction Diagram with KOBI 3.0

Associative Thinking and Education

Exploration of Knowledge: KOBI prioritizes associative thinking over traditional linear methods of information organization.

Interconnected Learning: The interconnection between concepts and content is highlighted, promoting critical understanding.

Physical Interaction and Sensory Immersion

Hololens and Embodiment: The use of Hololens introduces physical interaction for navigating knowledge structures.

Experiential Learning: By moving and physically interacting with images, texts, and videos, it is possible to connect with our natural way of learning using the body.

Future Work

- **Multi-user Functionality:** Promote collaborative learning and creative processes shared by multiple people simultaneously.
- **Artificial Intelligence and Creativity:** Enhance the conversational agent to support learning and creativity.
- **Content Expansion:** Broaden the range of media content currently available.

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