Real-world Lab "Robotic Artificial Intelligence"

Experience artificial intelligence through humanoid robots

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Real-world labs

- Citizens and researches work together on a topic/ project
- Long-term monitoring and design of the research process
- Real experiments to learn about social dynamics

Vision

Exploring the perspective of **"Living with robots in Karlsruhe"** by reflecting the needs of citizens against technical possibilities

Goals of the project

- Analyzing Human-Robot-Interactions in different real-world contexts → requirements analysis
- Opening up science to life-world perspectives and to the practical knowledge of stakeholders
- Feedback insights into development of humanoid robots

Research contexts

Center for Art and Media Karlsruhe

KIT Daycarecenter KinderUniversum

Municipal hospital Karlsruhe

Next steps

- Stakeholder workshops in research contexts to query expectations, retrieve experiences and identify contextual conditions for the use of humanoid robots
- Meta-workshop with stakeholders from all contexts to identify differences and similarities
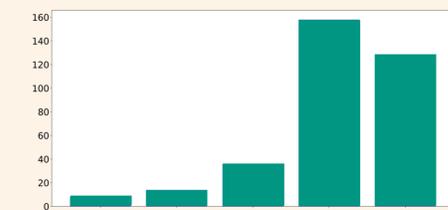- Citizen dialogue
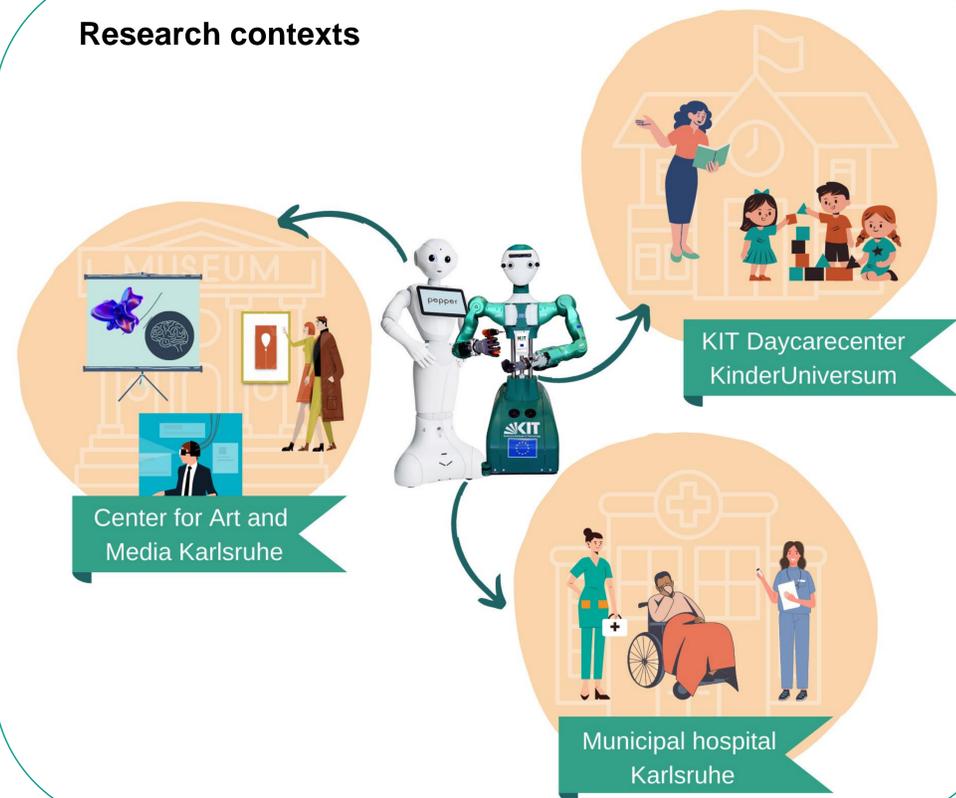
Preliminary insights

Citizens (n=344) took part in a survey about their perception on humanoid robots. The survey was conducted at the Center for Art and Media Karlsruhe, where the humanoid robot „Pepper" was part of the exhibition „BioMedia" in 2022.
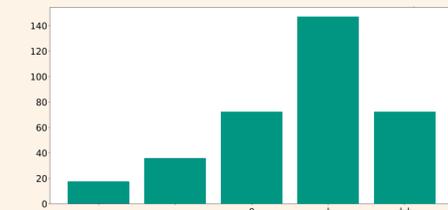
"Humanoid robots will make life easier"

"I can't tell why, but I'm afraid of humanoid robots"

"The interaction with humanoid robots can sometimes cause problems in human relationships"

Lessons learned

- Embedding robots in the respective contexts and – central concepts → orientation towards users needs
- Tension between technology path and institutional, organisational and individual needs
- Research process between technology development and transdisciplinary reflection, methodologically demanding and time-consuming