

# Guided Deliberation: Developing a Code of Practice for Ethical HRI

Lena Fiedler<sup>1</sup> [0000-0001-7734-9903], Paul Schweidler<sup>2</sup> [0000-0001-6390-7927]  
Markus Lehnshack<sup>3</sup> [0009-0002-6032-2864]

## Goal

The interdisciplinary project *rokit* explores the use of robots in public spaces. Research questions range from safety aspects and legal regulation to ethical aspects of diversity, equity and inclusive design. The aim of *rokit* is to address these questions by developing concepts for safe and sensible uses of robots in public spaces. Doing so, we identified a line of conflict that we want to discuss in our workshop:

From a philosophical perspective, ethics is rooted in fundamental investigations into life, values and culture. Following this claim, ethicists often argue that guidelines and checklists are not sufficient to ensure an ethical human-robot interaction (Goñi et al., 2024; Morley et al., 2021). However, from our experience, guidelines and checklists are very helpful tools for developers, designers and operators (e.g. Web Accessibility Guidelines (Caldwell et al., 2008) or the Checklist for trustworthy HRI (Kraus et al., 2022))

This raises the question how to meet the demands of robot developers, operators and researchers for clear rules and checklists on the one hand, and the demands of philosophers trying to initiate sustainable ethical reflection on the other hand.

With this workshop, we invite participants to discuss the strengths, weaknesses, and potentials of guidelines within the context of ethical deliberation. Our goal is to develop a concept for implementing ethical HRI guidelines without resorting to checkbox ethics.

## Topic

The workshop is based on the concrete case of robots in public spaces and the question of how these robots can be designed more inclusively.

## Intended audience

It is targeted towards anyone who is interested in tackling ethical, legal and social implications (ELSI) in HRI. No prior preparation is required, as we aim to make the workshop accessible to everyone interested in the topic, without any preconditions.

## Invited Speakers

- Katie Winkle, Assistant Professor at Upsala University, Department of Information Technology
- Karoline Zawieska, External VIP at the Aarhus University, School of Culture and Society
- Majken Kirkegaard Rasmussen, Associated Professor at the Aarhus University, Digital Design & Information Studies

---

<sup>1</sup> Lena Fiedler works as a research assistant at the Berlin Ethics Lab (BEL) at the Technical University Berlin in the research project *rokit* regarding the ethical implications of robots in public spaces. She is doing her doctorate on robots in public spaces with a focus feminist ethics and diversity, equity, and inclusion in technology.

<sup>2</sup> Paul Schweidler is a Human Factors Researcher and spokesman of the *rokit* project. He works at HFC Human-Factors-Consult GmbH and is affiliated with TU Berlin.

<sup>3</sup> Markus Lehnshack works as a senior research associate at the Institute for Climate Protection, Energy Law and Mobility (IKEM) in the research project *rokit* regarding the legal framework for robots in public spaces.

## Structure

The half-day workshop is structured as an interactive discussion with all participants. During the workshop, we will encourage group work and hands-on design activities to foster discussion among participants. Our focus will be on the specific question of inclusive design for robots in public spaces, using the example of Emu, a robot developed by Angsa Robotics to collect small litter in public parks. After the workshop, we plan to publish the results of our discussion and evaluate our brainstorming prompts as tools for guided deliberation.

At the beginning of the workshop, the participants are confronted with an accessibility checklist developed within the *rokit* project. We invite the participants to apply this checklist to the robot Emu and check whether the robots design is inclusive.

Afterwards, another, much broader framework is presented, which comprises a set of brainstorm prompts. The prompts are designed to trigger a discussion about inclusiveness in general and enable a guided deliberation of ethical human-robot interaction. This approach does not stand in contrast to the checklist but is presented as a complement. Again, the participants are asked to assess the robot. Results of both assessments will then be used as a foundation to come up with design recommendations to make the robot more inclusive and diversity friendly.

We will collect and discuss the results of the different approaches and evaluate the checklist, as well as the brainstorm prompts. Following the group work, the workshop is complemented by expert statements about robot inclusiveness and the challenges of designing for inclusivity. The workshop will end with an open discussion.

We plan to document and expand the results of the workshop in a joint publication.

## References

- Caldwell, B., Cooper, M., Reid, L. G., Vanderheiden, G., Chisholm, W., Slatin, J., & White, J. (2008). *Web content accessibility guidelines (WCAG) 2.0. WWW Consortium (W3C)*.
- Goñi, J. “Iñaki”, Rodrigues, E., Parga, M. J., Illanes, M., & Millán, M. J. (2024). Tooling with ethics in technology: A scoping review of responsible research and innovation tools. *Journal of Responsible Innovation*, 11(1), 2360228. <https://doi.org/10.1080/23299460.2024.2360228>
- Kraus, J., Babel, F., Hock, P., Hauber, K., & Baumann, M. (2022). The trustworthy and acceptable HRI checklist (TA-HRI): Questions and design recommendations to support a trust-worthy and acceptable design of human-robot interaction. *Gruppe. Interaktion. Organisation. Zeitschrift Für Angewandte Organisationspsychologie (GIO)*, 53(3), 307–328. <https://doi.org/10.1007/s11612-022-00643-8>
- Morley, J., Elhalal, A., Garcia, F., Kinsey, L., Mökander, J., & Floridi, L. (2021). Ethics as a Service: A Pragmatic Operationalisation of AI Ethics. *Minds and Machines*, 31(2), 239–256. <https://doi.org/10.1007/s11023-021-09563-w>