

## Making (Fake) New Friends: The ethical problematics of Human-Social Robots interactions and relationships

### Background

Social Robots are defined by Fox and Gambino (2021) as human made technologies able to take physical or digital forms, resembling humans through their behaviors or physical characteristics, developed to communicate with people. Additionally, they might exhibit personality traits, and non-verbal communication abilities (Fosch-Villaronga, 2020). Due to their anthropomorphic attributes, users might consider and treat them as humans (Di Dio et al., 2020), and develop empathy towards them (Darling et al., 2015). This para-social relationship might open the door to ethical challenges.

### Expected goals

Drawing upon past literature, research questions should focus on the possible ethical problematics arising from the Human-Social Robot's relationship. Outcomes should be tangible guidelines for the development and regulation of such robots. The methodology can be quantitative or qualitative, but would ideally involve an experimental design.

Example of research topics:

- Responsibility and consequences in case of robot's mistakes?
- Data privacy in case of in-house social robot?

### Recommended literature

- Floridi, L., Cows J., Beltrametti, M., Chatila, R., Chazerand, P., Dignum, V., Lütge, C., Madelin, R., Pagallo, U., Rossi, F., Schafer, B., Valcke, P. & Vayena, E. (2018). *AI4People – An ethical framework for a good society: opportunities, risks, principles, and recommendations*. *Minds and Machines*, 28(4), 689-707.
- Fosch-Villaronga, E., Lutz, C., & Tamò-Larrieux, A. (2019). Gathering expert opinions for social robots' ethical, legal, and societal concerns: Findings from four international workshops. *International Journal of Social Robotics*, 1-18.
- Weizenbaum, J. (1984). *Computer power and human reason: From judgement to calculation*. Harmondsworth UK: Penguin.
- Yogeeswaran, K., Złotowski, J., Livingstone, M., Bartneck, C., Sumioka, H., & Ishiguro, H. (2016). The interactive effects of robot anthropomorphism and robot ability on perceived threat and support for robotics research. *Journal of Human-Robot Interaction*, 5(2), 29-47.

### Details

Supervisor: Auxane Boch  
Starting date: as soon as possible

### Contact

If you are interested, please contact Auxane Boch ([Auxane.Boch@tum.de](mailto:Auxane.Boch@tum.de))

We are looking forward to your application!