

# Social Robotics

Albert-Ludwigs-Universität Freiburg



**UNI  
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Bernhard Nebel, Felix Lindner, Thorsten Engesser,  
Barbara Kuhnert, Laura Wächter

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- **Today:** Attempt to understand the concept of a social robot (and the 'big questions' related to it) by reflecting upon the way how social robots are displayed in pop culture.
- **Next Tuesday:** Researchers' attempts to define and systematize social robotics research.

# Rosie (60s & 80s)



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# Marvin (80s & 2000s)



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# Marvin?



- Why is there no Marvin in our homes?



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- What are the pros and cons of learning for social robots?  
What is the alternative to learning?
- Should there be robotic police officers?





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- What's the point in building robots like Ava?
- What's the difference between a human and a robot?
- Is 'being programmed' a valid difference?
  - Robot being programmed to flirt vs. Human being programmed to perceive the robot as flirting

- Android research by Hiroshi Ishiguro and colleagues (Osaka University)



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- Should it be forbidden to abuse robots?
- Should robots have rights?



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- Can robots be the better humans?
- What's the impact on human relationships if humans prefer robots as friends and partners?
  - A chance for less loneliness, less disappointment etc.?



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# Buddy (2015)

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- Do we really need such robots?
- Can they keep what they promise?

- 'Broad questions in social robotics'
  - What's the purpose of social robots?
  - What do social robots reveal about human nature?
  - How do social robots affect human behavior, thinking, relationships?
  - How to design a social robot for a specific role or task? How to design interactions?
  - Do we need regulations that restrict what kind of social robots are allowed?
- **Next Lecture:** Introduction to Social Robotics as a Science, more systematic access, attempts to define social robots.
- **Exercise Sheet:** Design your own social robot along several guiding questions. Exercise sheet is already on the web!  
Presentation at Nov 2nd.