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Call For Papers: HRI 2017 Workshop on Robots for Learning (R4L)

Date: March 6, 2017, Vienna, Austria
Website: http://r4l.epfl.ch/HRI2017/

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Important Dates

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Extended deadline: ---------- February 6,, 2017
Acceptance notification: ---------- February 16, 2017
Workshop event: ---------- March 6, 2017

Overview

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An increasing amount of HRI research focuses on the development of social robots acting as tutors. While robots have been popular as a focus for STEM teaching (see Lego Mindstorms or Thymio), the use of robots as tutors is novel. The field of HRI has started reporting on how to make effective robot tutors and how to measure their efficacy. These studies have shown that the potential of robots in educational settings is inarguable: robot can provide educational content tailored to the individual, something which is missing from current educational settings. They also have the potential to enhance learning via kinesthetic interaction, can improve the learner's self-esteem and can provide empathic feedback. Finally, robots have been shown to engage the learner, to motivate her in the learning task or to enhance collaboration in a group.

However, many questions still remain. For instance, what interaction strategies aid learning, and which hamper learning? How can we deal with the current technical limitations of robots? How should effective lessons be developed and implemented on a robot? Answering these and other questions requires a multidisciplinary effort, including contributions from pedagogy, developmental psychology, (computational) linguistics, artificial intelligence and HRI, among others.

The aim of this workshop is to engage scholars who aim to gain expertise in education and in robotics (from instructional design to inverse kinematics, ROS to ZPD, Markov to Piaget) into a new interdisciplinary community working on educational robotics. Participants will benefit from hearing from the forefront of field and from discussions on how to move from fundamental research towards the development of market-ready educational robots.

Topics include (but are not limited to) the following

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- Adaptive mechanisms for robot tutors, personalization and adaptation algorithms for tutoring interactions
- Theories and methods for tutoring (pedagogical and language acquisition)
- Engagement in educational human-robot interaction
- Gain in learning vs fun in learning with a robot

- Kinesthetic and non-verbal communication in human-robot interaction
- Attachment and learning with a social robot (social and cognitive development)
- Impact of embodiment on learning
- Shared knowledge and knowledge modelling in HRI
- Technical innovation in learning or teaching robots
- Rehabilitation and reeducation
- Long term learning interactions, design and methodologies for repeated human-robot encounters
- Human-robot collaborative learning
- Human-robot creativity
- Design of autonomous systems for tutoring interactions
- Privacy and ethical issues in robot tutoring applications

Submission Details

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We invite contributions spanning the areas of education and robotics. We explicitly encourage the submission of papers describing work in progress, or containing preliminary results to discuss with the community. Submission papers should range from 4 to 6 pages (including references) . The accepted papers will be published on the workshop website.
Sigconf template:
http://www.acm.org/sigs/publications/proceedings-templates

The maximum file size is 2 MB. Submissions should be in PDF format through Easy Chair:
https://easychair.org/conferences/?conf=r4lhri2017

Organizers

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