Robots for Learning

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ABSTRACT

An increasing amount of Human-Robot Interaction (HRI) research is focused on the development of social robot tutors. While robots have been popular as a tool for STEM teaching, the use of robots as tutors is novel. The field of HRI has started to report on how to make effective robot tutors. However, many challenges remain. For instance, what interaction strategies aid learning, and which hamper learning? How can we deal with the current technical limitations of robots? Answering these and other questions requires a multidisciplinary effort, including contributions from pedagogy, developmental psychology, (computational) linguistics, artificial intelligence and HRI, among others. This abstract provides an overview of the current state-of-the-art in robot tutors and describes the aims of the Robots for Learning (R4L) workshop in bringing together a multidisciplinary audience for furthering the development of market-ready educational robots.

CCS Concepts

•**Computer systems organization** → **External interfaces for robotics;** •**Applied computing** → **Education;** •**Human-centered computing** → Human computer interaction (HCI);

Keywords

Human-Robot Interaction, Robots in Education, Tutor Robots, Child-Robot Interaction

1. INTRODUCTION

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2. BACKGROUND

3. OUTLINE OF THE WORKSHOP

The aim of this workshop is to engage scholars who wish to gain expertise in education and in 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.

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6. REFERENCES