Presentation of the paper “Analysing the attitude of students towards robots when lectured on programming by robotic or human teachers”

Francisco J. Rodríguez-Sedano
Grupo de Robótica.
Depto. Ingenierías Mecánica, Informática y Aeroespacial
Escuela de Ingenierías Industrial e Informática
Universidad de León. 24008-León (Spain)
(+34) 987-291-000
frods@unileon.es

Abstract
This is the presentation of the paper entitled “Analysing the attitude of students towards robots when lectured on programming by robotic or human teachers” in the Computational Thinking Track of the TEEM 2016 International Conference held in Salamanca (Spain) in November 2-4, 2016.

This paper explores the acceptance of robots as teachers for a group of K-12 students. These students attended a programming session designed to applied computational principles in different fields. We have analyzed how this acceptance varies with age, and also if their opinion changes if they were exposed to a real robot teacher or not. To this end, participants (N=210) were divided in two groups, one was lectured by a teacher and the other one by a Baxter robot. We used the Negative Attitudes towards Robots Scale and the Robot Anxiety Scale questionnaires to evaluate students’ perception. Statistical analysis of the answers to these questionnaires is discussed in the paper, both taking into account the whole groups and another considering three subgroups based on age. Main conclusion of the study is that the use of the robot is relevant in the perception of the students about robots, but also that age is significant in the perception of robots as potential teachers.

The presented paper may be cited as:

Link to the presentation
http://es.slideshare.net/grialusal/analyzing-the-attitude-of-students-towards-robots-when-lectured-on-programming-by-robotic-or-human-teachers

Keywords
Educational Robotics; Human Robot Interaction; Social Robotics; Learning
References


