

13th International Conference on Robotics in Education

Virtual Event – 27. - 28. 04. 2022

Time specifications of sessions are given in **Central European Summer Time UTC +2**

Regular paper presentations: 15-20 minutes plus 5 minutes Q&A

Short paper presentations (marked with a * symbol): 7 minutes plus 3 minutes Q&A

Wednesday, 27. 04.

11:00 Opening Session *Richard Balogh, Wilfried Lepuschitz, David Obdržálek – RiE 2022 Co-Chairs*

11:15 Session 1: Workshops, Curricula and Related Aspects #1

Educational Robots and Flow Experience

[3] *Kristina Cergol and Petra Karabin*

Design and implementation of a multi-disciplinary robotics curriculum for master's student: the use case of AMSCC international semester

[14] *Yves Bergeon, Jean Motsch and Vaclav Krivanek*

Light Painting with Mobile Robots as Motivating Projects for Robotics and Control Education

[10] *Sylvain Bertrand, Lionel Prevost, Felicia Ionascu, Alexandre Briere, Raphael Koskas, Richard Taquet, Falitiana Andrianantoandro and Meyssan Kanzari*

12:30 Break

13:30 Session 2: Social Robotics

How Social Robots Can Facilitate Teaching Quality – Findings from an Explorative Interview Study

[5] *Stefan Sonderegger, Josef Guggemos and Sabine Seufert*

Pupil-robot interaction in a math card game: an iterative process of studying the use of social robotics in primary school math education

[12] *Mattias Wingren, Mats Braskén, Ray Pörn and Sören Andersson*

Telepresence Robots in Higher Education – the Current State of Research

[22] *Janika Leoste, Kaido Kikkas, Kalle Tammemäe, Martin Rebane, Edmund Laugasson and Kristiina Hakk*

14:45 Break

15:30 Session 3: Workshops, Curricula and Related Aspects #2

Perspectives on Virtual Reality in Higher Education for Robotics and Related Engineering Disciplines

[16] *Sebastian Felix Rauh and Horst Orsolits*

Towards futures literacy through computational thinking and storytelling activities*

[7] *Gerhard Brandhofer and Karin Tengler*

Understanding Machine Learning through AI-powered Educational Robotics - Pilot Study with Undergraduate Students

[21] *Amy Eguchi*

16:30 Break

17:00 Workshop on teaching with micro:bits

Richard Balogh: interactive on-line workshop with microbits and programming with Blockly

Thursday, 28.04.

11:00 Session 4: Technologies for Educational Robotics

- [11] **Open Design meets Robotics - Customizable Educational Robot Construction System**
Richard Balogh, Lubomir Fundarek and [Michala Lipkova](#)
- [4] **Playing Tic-tac-toe with a Lightweight Robot**
[Christian Thormann](#) and Alexander Winkler
- [1] **Design of a bio-inspired optical compass for education purposes**
[Stéphane Viollet](#), Nicolas Thellier, Nicolas Thouvenel, Julien Dipéri and Julien Serres

12:15 Break

13:30 Session 5: Evaluating Educational Robotics

- [6] **Teachers' exposure workshop for integrating robotics activities in STEM**
[Daaa Saad](#) and Rinat Rosenberg-Kima
- [13] **Software Testing, AI and Robotics (STAIR) Learning Lab**
[Simon Haller-Seeber](#), Thomas Gatterer, Patrick Hofmann, Christopher Kelter, Thomas Auer and Michael Felderer
- [23] **Evaluating the effects of educational robotics activities concerning the interest in STEM and collaboration skills***
[Georg Jäggle](#), Willfried Lepuschitz, Tanja Tomitsch, Peter Wachter and Markus Vincze
- [2] **Children's perspectives on robotics and the relevance to educational robotics competitions***
[Eftychios Christoforou](#), Sotiris Avgousti, Panicos Masouras and Andreas Panayides

14:40 Break

15:30 Session 6: Workshops, Curricula and Related Aspects #3

- [20] **Educational Robotics: Methodological Considerations and Practice of Mechatronics**
[Anton Yudin](#), Andrey Vlasov, Maria Salmina and Vladimir Sukhotskiy
- [19] **Taxonomy for educational robotics at schools***
[Bjarke Kristian Maigaard Kjær Pedersen](#), Vuyelwa David Ruwodo, Anastasia Shipepe, Lannie Uwu-Khaeb, Samuel Tewelde Yigzaw, Ilkka Jormanainen, Jacob Nielsen and Erkki Sutinen
- [15] **Perceptual Evaluation of Educational Robots' Consequential Sounds***
[Ivana Storjak](#) and Ana Sovic Krzic

16:15 Résumé / Outlook on RiE 2022