



EDUROBOTICS 2020: INTERNATIONAL CONFERENCE EDUCATIONAL ROBOTICS 2020

Department of Information Engineering and Mathematics,
University of Siena

Siena, Italy, ~~November 26-27, 2020~~

new dates! February 25-26, 2021

Conference website	http://edurobotics2020.edumotiva.eu
Submission link	https://easychair.org/conferences/?conf=edurobotics2020
Submission deadline	June 30, 2020 new (final!) deadline for paper submissions November 30, 2020

Topics: [educational robotics](#) [robotics curricula & resources](#) [robotics & constructionism](#) [robotics & maker movement](#)

The International Conference Educational Robotics (EDUROBOTICS, former TRTWR) has a history of previous successful editions which witnesses the continuously growing interest in educational robotics world-wide and have helped to build a community of researchers and educators in Educational Robotics at European and international level. Under its former name "Teaching Robotics and Teaching With Robotics- TRTWR" this series of International workshops originated by the [TERECOP project](#) in [Venice \(2008\)](#) and grew up in [Darmstadt \(2010\)](#), in [Riva del Garda \(2012\)](#) and in [Padua \(2014\)](#) and upgraded to [International Conference Educational Robotics in Athens, 2016](#) and in [Rome 2018](#)

The Conference Publications have included so far open online proceedings, special issues in journals and books

[Themes in Science & Technology Education, vol. 6, No1 \(2013\) guest editors D. Alimisis, M. Moro](#) ,

[Robotics & Autonomous Systems Journal, Jan 2016,](#) guest editors D. Alimisis, M. Moro

[Alimisis, D. , Moro, M., Menegatti, E. \(eds.\). Educational Robotics in the Makers Era, Advances in Intelligent Systems and Computing 560, Springer 2017](#)

[Educational Robotics in the Context of the Maker Movement, Editors: Moro, Michele, Alimisis, Dimitris, Iocchi, Luca \(Eds.\), Springer 2020](#)

EDUROBOTICS 2020: The main theme

HIGHLY-ACCESSIBLE AND MULTIDISCIPLINARY EDUCATION PROGRAMS TO PROMOTE the 21st CENTURY EDUCATION IN ROBOTICS & WITH ROBOTICS: The conference will focus on current learning and training needs in robotics from pre-school age to universities and on the development of a sustainable framework to promote education in robotics and with robotics including curricula and resources for school & higher education that will support the development of the 21st century skills for youth. The conference will emphasize the role of robotics as learning object and tool in the frame of the STEAM education and in the light of learning theories and methodologies suggested by Constructivism and Constructionism (Piaget, Papert) and the currently emerging in education maker movement. The conference aims at providing an insight to the latest state-of-the-art in educational robotics to the community (academia, schools, and industry).

The INBOTS workshop

This year the conference participants will be able to attend the INBOTS workshop that will be hosted by the conference. The [INBOTS CSA project](#)/WP3 (2018-2020) works to create a sustainable framework that will promote education in robotics and with robotics from pre-school to university and outside the education system. Results from the INBOTS project will be presented and discussed with the participants.

Workshop: teaching robotics online

As the COVID pandemic unfolds across countries around the world, the normal educational practices face challenges. This workshop will draw upon the needs emerged in higher and school education during the pandemic outbreak. Amongst many institutions universities and schools have shifted their base to online platforms to conduct classes online as an alternative to ordinary face to face classes. However, the teachers in many countries were not ready for this rapid change. The workshop will explore methods, platforms, tools and pedagogies needed for teaching robotics online; how can the Edurobotics community reinforce the ability of higher and school education to provide high quality, inclusive digital education in the field of Robotics? How can we build educators' capacity to implement online, distance teaching and learning in Robotics?

We expect an exciting conference program and cordially invite researchers and educators from the field of Educational Robotics to submit their papers and to meet-up in medieval Siena, November 26-27, 2020!

Submission Guidelines

All papers must be original and not submitted to another journal or conference.

The official language of the conference is English.

The following paper categories are welcome:

Full papers reporting research and good practices in the fields of research and development in Educational Robotics, as well as new applications, the latest products, systems and components for using robotics at all levels of education from kindergarten to universities in both formal and informal education settings. The papers should be between 8-12 pages including title of the paper, abstract, keywords, author's name(s), speaker's name, affiliation, e-mail.

Short papers (4 pages) reporting work in progress or practical activities from schools. The short papers will be included in the proceedings and will be presented at the conference during the poster session.

Papers intended for the INBOTS workshop should include the word INBOTS in the keywords.

The authors should prepare their papers following the [Proceedings Guidelines for Authors](#) and can use this [Word Template](#) or [LaTeX Package](#). Alternatively you can download them directly from Springer [here](#)

The papers should be submitted in pdf format by the submission deadline via the EasyChair conference system using the following link: <https://easychair.org/conferences/?conf=edurobotics2020>

COVID-19 update

At the organisers' and chairs' team of EDUROBOTICS 2020 Conference we are really concerned about COVID pandemic and the safety of participants is our priority. Unfortunately, the current conditions do not allow EDUROBOTICS conference to be held in Siena, IT as planned; the conference will be held in a **fully virtual format** on the same dates, February 25-26, 2021.

Publication

All accepted papers will be included in a book to be published with Springer.

List of Topics

learning & training needs in robotics

robotics curricula & resources from pre-school to universities

edurobotics and constructionism

edurobotics and maker movement

3d modeling & 3d printing in edurobotics

teacher training in edurobotics

simulators and virtual robots in education

programming tools in edurobotics

competitions with educational robots

Committees

Co-chairs

Monica Malvezzi, University of Siena, Italy

Dimitris Alimisis, EDUMOTIVA, Greece

Michele Moro, University of Padua, Italy

Program Committee (to be updated)

Dimitris Alimisis, EDUMOTIVA, Greece

Richard Balogh, Slovak University of Technology in Bratislava

Ansgar Bredenfled. Dr. Bredenfled UG, Germany

Dave Catlin, Valiant Technology, UK

Linda Daniela, University of Latvia, Latvia

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Amy Eguchi, University of California San Diego, USA

Nikleia Eteokleous, Frederick University Cyprus

Paolo Fiorini, University of Verona, Italy

Reinhard Gerndt, Ostfalia University of Applied Sciences, Germany

Ilkka Jormanainen, University of Eastern Finland

Ken Kahn, University of Oxford, UK

Martin Kandlhofer, Graz University of Technology, Institute for Software technology, Austria

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Britt Ostlund, KTH, Royal Institute of Technology, Sweden

Alfredo Pina, Public University of Navarra, Spain

Maximiliano Romero, University IUAV of Venice, Italy

Theodosios Sapounidis, Aristotle University of Thessaloniki, Greece

Sandra Schoen, Salzburg Research Forschungsgesellschaft, Austria

Igor Verner, Technion.ac.il, Israel

Anton Yudin, Bauman Moscow State Technical University, Moscow, Russian Federation

Venue

The conference will be held at the ~~Department of Information Engineering and Mathematics, University of Siena, via Roma 56, 53100 Siena, Italy,~~ in virtual format.

Contact

All questions about submissions should be emailed to the co-chairs

Monica Malvezzi, [monicamalvezzi at gmail.com](mailto:monicamalvezzi@gmail.com)>

Dimitris Alimisis [alimisis at edumotiva.eu](mailto:alimisis@edumotiva.eu)

Michele Moro [michele.moro at unipd.it](mailto:michele.moro@unipd.it)