Conference Program

Thursday, April 14

08:00-08:50 Registration

08:50-09:40 Opening Session

- Welcome & Introduction
  Richard Balogh, Wilfried Lepuschitz, David Obdržálek – RiE 2016 Co-Chairpersons
- Keynote: Opportunities and Obstacles of Constructionism in Educational Robotics
  Ass.-Prof. Pavel Petrovič – Comenius University in Bratislava, SK

09:40-09:50 Short break

09:50-10:40 Technical Session 1: Overview on Educational Robotics

  Session chair: Pavel Petrovič

  - The Educational Robotics Landscape (#12*)
    Lara Lammer, Markus Vincze, Martin Kandlhofer and Gerald Steinbauer
  - ER4STEM – Educational Robotics for Science, Technology, Engineering, and Mathematics (#6*)
    Lara Lammer, Wilfried Lepuschitz, Chronis Kynigos, Angele Giuliano and Carina Girvan
  - Activity Plan Template: a mediating tool for supporting learning design with robotics (#33)
    Nikoleta Yiannoutsou, Sofia Nikitopoulou, Chronis Kynigos, Ivaylo Gueorguiev and Julian Angel Fernandez

10:40-11:10 Coffee break

11:10-12:20 Technical Session 2: Workshops, Activities and Curricula #1

  Session chair: Ivaylo Gueorguiev

  - Student-Robot Interactions in Museum Workshops: Learning Activities and Outcomes (#16)
    Alex Polishuk and Igor Verner
• **A workshop to promote Arduino-based robots as wide spectrum learning support tools (#17)**  
  Francesca Agatolio and Michele Moro

• **How to teach with LEGO WeDo at primary school (#24*)**  
  Karolina Mayerova and Michaela Veselovská

12:20-13:20 Lunch break

**13:20-14:10 ECER Session**

4 talks by high school students

**14:10-15:30 Technical Session 3: Controllers, Platforms and Tools**  
*Session chair: Igor Verner*

• **Aeris – robots laboratory with dynamic environment (#20)**  
  Michal Chovanec, Lukáš Čechovič and Lukáš Mandák

• **UNC++Duino: A kit for learning to program robots in Python and C starting from blocks (#23)**  
  Luciana Benotti, Marcos Gomez and Cecilia Martinez

• **On the Design and Implementation of a Virtual Machine for Arduino (#30)**  
  Gonzalo Zabala, Sebastián Blanco, Matías Teragni and Ricardo Morán

• **Networking extension module for Yrobot – a modular educational robotic platform (#19*)**  
  Michal Hodon, Juraj Micek and Michal Kochlan

15:40-16:00 Coffee break

**16:00-18:00 Technical Session 4: Integration with other Science Domains**  
*Session chair: David Obdrzalek*

• **Robotics in School Chemistry Laboratories (#4)**  
  Igor Verner and Leonid Revzin

• **Applied Social Robotics – Building Interactive Robots with LEGO Mindstorms (#14)**  
  Andreas Kipp and Sebastian Schneider

• **Model based design of the competition car (#1)**  
  Richard Balogh

• **Offering Multiple Entry-Points into STEM for Young People (#32)**  
  Wilfried Lepuschitz, Gottfried Koppensteiner and Munir Merdan

• **Usability Evaluation of a Raspberry-Pi Telepresence Robot Controlled by Android Smartphones (#11)**  
  Worawan Marumgsith and Krit Janard

From 19:00 Conference Dinner
Friday, April 15

09:00-09:40 Morning Session

- **Keynote: A Journey through the Minds of Educational Robotics Stakeholders**
  Lara Lammer, Vienna University of Technology, AT

09:40-09:50 Short break

09:50-11:00 Technical Session 5: Workshops, Activities and Curricula #2

Session chair: Lara Lammer

- **Concept Inventories for Quality Assurance of Study Programs in Robotics (#27)**
  Reinhard Gerndt and Jens Lüssem
- **Project Oriented Approach in Educational Robotics: From Robotic Competition to Practical Appliance (#25)**
  Anton Yudin, Andrey Vlasov, Maria Salmina and Maxim Kolesnikov
- **Using Modern Software and the ICE approach when Teaching University Students Modelling in Robotics (#21*)**
  Sven Rönnbäck
- **Breeding Robots to Learn How to Rule Complex Systems (#9*)**
  Franco Rubinacci, Michela Ponticorvo, Onofrio Gigliotta and Orazio Miglino

11:00-11:10 Short break

11:10-12:20 Technical Session 6: Human-Robot Interaction

Session chair: Julian Angel-Fernandez

- **Personalizing educational game play with a robot partner (#22)**
  Mirjam De Haas and Emilia Barakova
- **Robot moves as tangible feedback in a mathematical game at primary school (#8)**
  Sonia Mandin, Marina De Simone and Sophie Soury-Lavergne
- **Robots as Tutee (#26*)**
  Lena Pareto
- **The Experience of Developing Mr. Saud Educational System using NAO Humanoid Robot (#34*)**
  Hend Al-Khalifa, Bashayer Alsalman, Deema Alnuhait, Atheer Alkhalifah, Ohoud Meldah and Sara Aloud

12:20-13:20 Lunch break

13:20-14:45 Technical Session 7: Simulation Environments and Robotics

Session chair: Richard Balogh

- **V-REP and LabVIEW in the service of education (#5)**
  Marek Gawryszewski, Piotr Kmiecik and Grzegorz Granosik
- **Developing Extended Real and Virtual Robotics Enhancement Classes with Years 10-13 (#7)**
  Peter Samuels and Sheila Poppa
- **A thousand robots for each student: using cloud robot simulations to teach robotics (#29)**
  Ricardo Tellez
- **Educational robot task virtual model transformation into real environment (#13*)**
  Renata Burbaitė, Adomas Paulauskas and Vytautas Štuikys
14:45-15:00 Closing Session

- **Outlook on RiE 2017 & Résumé**
  Richard Balogh, Wilfried Lepuschitz, David Obdržálek – RiE 2016 Co-Chairpersons

From 15:00 ECER Finals

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

**Short paper presentations (paper ID marked with star):** 8-10 minutes plus 3 minutes Q&A, to be complemented by discussions with authors next to posters during breaks