

RiE 2015

6th International Conference on
Robotics in Education

Conference Program

May 20-23, 2015

Yverdon-les-Bains, Switzerland

Join RiE 2015, the 6th International Conference on Robotics in Education

The Conference takes place at HEIG-VD, St-Roch, Av. des Sports 20, Rooms S105-147, unless otherwise noted.

Wednesday, 20 May 2015

Wednesday morning, 20 May 2015

9 :00 - 12 :00	Workshop 1 , room S147	
	Practical Mechatronics - Training for Mobile Robot Competitions	Org. Anton Yudin, D. Sukhotskiy, and M. Salmina
-	<i>Incl Coffee break (10h-10h30)</i>	

12 :00	<i>Lunch</i>	
--------	--------------	--

Wednesday afternoon, 20 May 2015 – Parallel Workshops A and B

A 13 :30 - 17 :00	Workshop 2 , room S106	
	Which approaches do actually work when introducing children to robotics? Discussing lessons learned and failure stories	Org. Lara Lammer and Martin Kandlhofer
	<i>Incl Coffee break (15h30-16h)</i>	

B 13 :30 - 17 :00	Workshop 3, room S147	
	La robotique scolaire - un potentiel au-delà de la robotique	Org. Denis Leuba et al.
	<i>Incl Coffee break (15h30-16h)</i>	

rie2015.org

info@rie2015.org

Thursday, 21 May 2015

Thursday morning, 21 May 2015

9 :00	Room S147 Welcome Introduction Keynote – Webots and ProgBot Competition	Richard Balogh, David Obdrzalek, Jean-Daniel Dessimoz, RiE Chairpersons Olivier Michel, Cyberbotics
9h45	<i>Coffee break</i>	<i>Incl. ProgBot session</i>
10 :15 -12 :00	Technical session 1 , room S147 Methods and Best Practices	Chairperson Julio Pastor
1.1	Proposal of a low cost educational mobile robotics experiment: an approach based on hardware and simulation	José Gonçalves, Manuel Silva, Paulo Costa and Armando Sousa.
1.2	Using Educational Robotics Research to Transform the Classroom: Establishing a Robotics Community of Evidenced-based Practice using MESH Guides and the TACTICS Framework	Dave Catlin, Andrew P. Csizmadia, James G. Omeara and Sarah Younie.
1.3	Orbital Robotics: A new Frontier in Education	Nikolena Christofi, Monica Talevi, Joanna Holt, Kjetil Wormnes, Iosif S. Paraskevas and Evangelos G. Papadopoulos.
12 :00	<i>Lunch</i>	<i>Incl. ProgBot session</i>

Thursday afternoon 1, 21 May 2015

13 :00 -15 :30	Technical session 2 , room S147 Education and Mechatronic Platforms	Chairperson Pasd Putthapipat
2.1	IniRobot : a pedagogical kit to initiate children to concepts of robotics and computer science	Didier Roy, Pierre-Yves Oudeyer, Gordana Gerber, Morgane Chevalier, Francesco Mondada and Stéphane Magnenat.
2.2	Mechatronic Device to Reproduce Virtual Image on Material Plane	Anton Yudin, Andrey Vlasov and Maxim Kolesnikov.
2.3	Teaching Robotics in Primary Education: Applying a Constructivist Educational Methodology for the Creation of a Space vehicle with LEGO NXT	Angeliki Theodosi
2.4	Affordable Mobile Robotic Platforms for Teaching Computer Science at African Universities	Ernest Gyebi, Marc Hanheide and Grzegorz Cielniak.
2.5 *	Hedgehog: A Smart Phone Driven Controller for Educational Robotics	Clemens Koza, Christoph Krofitsch, Wilfried Lepuschitz and Gottfried Koppensteiner.
2.6 *	Teaching Intelligent Robotics with a Low-Cost Mobile Robot Platform	Luka Čehovin, Anže Rezelj and Danijel Skocaj.
2.7 *	Continuous Engineering Education Based on Mechatronics and Digital Fabrication	Maria Salmina, Vladimir Kuznetsov, Yuri Poduraev, Anton Yudin, Andrey Vlasov, Vladimir Sukhotskiy, Yuri Tsibulin
15 :30	<i>Coffee break</i>	<i>Incl. ProgBot session</i>

Thursday, 21 May 2015 (continued)

Thursday afternoon 2, 21 May 2015 , room S147 (continued)

16 :00 -18:00	Technical session 3 , room S147 Curriculum Aspects	Chairperson Boualem Kazed
3.1	Development of a multi-grade curriculum: project “READY”	Sabrina Rubenzer, Georg Richter and Alexander Hofmann.
3.2	Introducing Educational Robotics through a short lab in the training of future support teachers	Michele Moro, Emanuele Menegatti, Silvia Di Battista and Monica Pivetti.
3.3	Examining the Experiences of Upper Level College Students in Introduction to Robotics	Jessica Swenson.
3.4	Crazy Robots – An Introduction to Robotics from the Product Developer’s Perspective	Lara Lammer, Matthias Hirschmanner, Astrid Weiss and Markus Vincze.

Thursday evening, 21 May 2015

Starting at	Social Dinner , at Restaurant du Château, 19 :00 Place Pestalozzi 13, Yverdon-les-Bains	For registered participants
-------------	---	-----------------------------

Friday, 22 May 2015

Friday morning, 22 May 2015

9 :00 -10 :30	Technical session 4 , room S147 Competition Related Aspects	Chairperson David Obdrzalek
4.1	International Robotics Competitions as Excellent Training Grounds for Technical Education and Student Exchanges	Jean-Daniel Dessimoz
4.2	Practical Mechatronics: Training for Mobile Robot Competition	Anton Yudin, Dmitry Sukhotskiy and Maria Salmina.
4.3	Learning to Program Mobile Robots in the ROS Summer School Series	Alexander Ferrein, Stephan Kallweit, Ingrid Scholl and Walter Reichert.
<i>Coffee break</i>		<i>Incl. ProgBot session</i>
11 :00 -12 :00	Technical session 5 , room S147 Conceptual Aspects and Cognition	Chairperson Hugo Ferreira
5.1	Towards an Robotics Concept Inventory	Reinhard Gerndt and Jens Lüsse.
5.2 *	Mattie Robot - A white-box approach for introducing children with different interests to robotics	Matthias Hirschmanner, Lara Lammer and Markus Vincze
5.3 *	Cognition, to define alternative worlds and possible futures, visions, thus triggering anti-causal actions	Jean-Daniel Dessimoz

12:00	<i>Lunch</i>	<i>Incl. ProgBot session</i>
-------	--------------	------------------------------

Friday, 22 May 2015 (continued)

Friday afternoon, 22 May 2015

13 :30 -15 :15	Technical session 6 , room S147 Other, Selected Topics	Chairperson Michele Moro
6.1	Technology intervention in neurorehabilitation - A practical approach to teaching	Asif Hussain, Paolo Tommasino, Charmayne Hughes, W.G. Kumudu C. Gamage, Wayne Dailey, Etienne Burdet and Domenico Campolo.
6.2	Starting Robotics in Secondary School : Assembling i-SIS, an Autonomous Vehicle	Daniel López-Cazorla, Montserrat Garcia-Rodríguez, Oriol Tarradellas-Viñas, and Martha-Ivón Cárdenas
6.3	Technology and Art -- Solving Interdisciplinary Problems	Igor Zubrycki and Grzegorz Granosik.
6.4 *	Educational Robots and Mathematical Modelling	Dave Catlin and Edward Otieno.
15 :15	<i>Coffee break</i>	<i>Incl. ProgBot session</i>
16 :30**	Keynote , <i>at La Marive</i> , Quai de Nogent 1, Robots in Space - Des Robots dans l'Espace	along rue de l'Arsenal, 1400 Yverdon-les-Bains Claude Nicollier, astronaut
17 :30**	Formal end of RiE 2015 Conference	

Saturday, 23 May 2015

At La Marive : ProgBot competition goes on, along with Eurobot competitions , with Progbot finals at 17 :00** .

* Stars after session and presentation numbers denote shorter presentations, to be complemented by possible interactive discussions with authors near posters, during subsequent coffee and lunch breaks.

** approximate time ; depending on robot competition outcome.

RiE 2015

6th International Conference on
Robotics in Education

Conference Program

May 20-23, 2015

Yverdon-les-Bains, Switzerland

Join RiE 2015, the 6th International Conference on Robotics in Education

r i e 2 0 1 5 . o r g

info@rie2015.org