13th International Conference on Remote Engineering and Virtual Instrumentation

Date: Wednesday, 24/Feb/2016

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8:30am	Registration opens					
- 9:00am	UNED facilities location and how to get there http://www.rev-conference.org/REV2016/documents/Madrid_practical_infos.pdf					
				<u></u>		
9:00am - 10:30am	WS-1A: Workshop - Lab sessions in VISIR laboratories Location: Salon de Grados Chair: Gustavo R. Alves, Polytechnic of Porto - School of Engineering	WS-1B: Workshop - The TATU Lab & Smart Education Location: Ricardo Marin Chair: Reinhard Langmann, Duesseldorf University of Applied Sciences	WS-1C: Workshop - Simple modular system "iSES Remote Lab SDK" for creation of remote experiments accessible from PC, tablets and mobile phones Location: Florentino Sanz			
	Lab sessions in VISIR laboratories	The TATU Lab & Smart Education	Chair: Frantisek Lustig, Charles University Prague			
	Gustavsson, Ingvar; Nilsson, Kristian; Zackrisson, Johan; Claesson, Lena; <u>Alves,</u> <u>Gustavo R.</u> ; Fidalgo, André V.; García Zubía, Javier; Hernández Jayo, Unai; Castro	Langmann, Reinhard; Makarova, Yuliya; Rojas-Peña, Leandro; Galkin, Pavlo; Klyuchnik, Igor; Voropaeva, Viktoriya; Pozepaev, Valerii; Zinyuk, Lyubov; Skrypyuk, Rostislav; S	Simple modular system "iSES Remote Lab SDK" for creation of remote experiments accessible from PC, tablets and mobile phones			
40:00-:	14.05.50 ··· · · · · · · · · · · · · · · · · ·		Lustig, Frantisek	<u> </u>		
10:00am -	IAOE EC meeting: IAOE Exe Location: Andres Bello room	ecutive Committee meeting				
12:00pm						
10:30am -	Coffee Break					
11:00am						
11:00am -	WS-2A: Workshop - Lab sessions in VISIR	WS-2B: Workshop - The TATU Lab & Smart	WS-2C: Workshop - Simple modular system "iSES			
12:30pm	laboratories Location: Salon de Grados Chair: Gustavo R. Alves, Polytechnic of Porto - School of Engineering	Education Location: Ricardo Marin Chair: Reinhard Langmann, Duesseldorf University of Applied Sciences	Remote Lab SDK" for creation of remote experiments accessible from PC, tablets and mobile phones Location: Florentino Sanz Chair: Frantisek Lustig, Charles University Prague			
12:30pm	PL1: Opening and Keynote	Session - IAoE message				
2:00pm	Chair: Manuel Castro, UNED Chair: Ether Souto, UNED					
	Remote Labs: 360 Degree Garcia-Zubia, Javier	es View				
2:00pm	Lunch Break					
3:00pm						
3:00pm	1A: PhD Forum 1 (internal	1B: Full Papers	1C: Full Papers	1D: Full Papers		
4:30pm	Location: Salon de Actos Chair: Oscar M Bonastre, Miguel Hernandez University	Location: Salon de Grados Chair: Sergio Martin, Spanish University for Distance Education (UNED)	Location: Ricardo Marin Chair: Doru Ursutiu, "University ""Transilvania" of Brasov, Romania"	Location: Florentino Sanz Chair: Karsten Henke, Ilmenau University of Technology		
	Online Lab Infrastructure as a Service: A new Paradigm to Simplify the Development and Deployment of Online Labs <u>Zutin, Danilo</u> ; Auer, Michael;	Models of Remote Laboratories and Collaborative Roles for	Variable Interactivity with Dynamic Control Strategies in Remote Laboratory	Additional Specialty of a Technical Teacher for Engineers Acquired		
	Orduña, Pablo; Kreiter, Christian	Learning Environments Zapata Rivera, Luis Felipe; Larrondo-Petrie,	Experiments Maiti, Ananda; Kist,	in Continuing Education at Tallinn		

management systems Practices using remote laboratories to improve the use of the subjects and get required competences

Menacho, Antonio; Gil,...

The Evaluation of **Remote Laboratories -Development and** application of a holistic model for the evaluation of online remote laboratories in manufacturing technology education May, Dominik; Terkowsky,

Remote Laboratories for Electronics and **New Steps in Learning Process Integration**

Claudius; Ortelt, Tobias

R.; Tekkaya, A. Erman

Garcia-Loro, Felix; Macho, Alejandro; Sancristobal, Elio; Rodriguez Artacho, Miguel; Diaz, Gabriel; Castro, Manuel

REMLABNET III federated remote laboratory management system for university and secondary schools

Schauer, Franz; Krbeček, Michal; Beňo, Pavel; Gerža, Michal; Pálka, Lukáš; Špiláková, Petra; Tkac, Lukas

Andrew D.

Classifying online laboratories: reality, simulation, user perception and potential overlaps

Orduña, Pablo; Garcia-Zubia, Javier; Dziabenko, Olga; Rodriguez-Gil, Luis; Angulo, Ignacio; Hernández, Unai; Azcuenaga, Esteban

Automated Experiments on EjsS Laboratories

Galan, Daniel; Heradio, Ruben; de la Torre, Luis; Dormido, Sebastian: Esquembre, Francisco

A Wireless Robotic **Educational Platform** approach

Plaza Merino, Pedro; Sancristobal Ruiz, Elio; Carro Fernandez, German; Castro Gil, Manuel

Mobile Devices and Applications Enhancing Engineering Education in ESP Simonova, Ivana;

Technology Rüütmann, Tiia

Overview of the first vear of the L3-EOLES training

Andrieu, Guillaume; Farah, Said; Fredon, Thomas; Benachenhou, Abdelhalim; Ankrim, Mohamed; Bouchlaghem, Karim; Aknin, Noura; Barataud, Denis; Gericota, Manuel: De...

Students' Perception of Implementing a **Smart Learning** System (SLS) based on Moodle at **Fujairah College** AlHamad, Ahmad Qasim

Remote control and instrumentation of **Android devices**

Díaz Zayas, Almudena; Recio Pérez, Álvaro Manuel; García-Pérez, Cesar Augusto; Merino,

4:30pm

5:00pm

5:00pm

6:30pm

Coffee Break

2A: PhD Forum 2 (open session)

Location: Salon de Actos Chair: Oscar M Bonastre, Miguel Hernandez University

Online Lab Infrastructure as a Service: A new **Paradigm to Simplify** the Development and **Deployment of Online** Labs

Zutin, Danilo; Auer, Michael; Orduña, Pablo; Kreiter, Christian

Competency-based learning management systems Practices using remote laboratories to improve the use of the subjects and get required competences

Menacho, Antonio; Gil, Rosario; Castro, Manuel; Pérez Molina, Clara María

An architecture for new

2B: Full Papers

Location: Salon de Grados Chair: Alexander A. Kist, University of Southern Queensland

MOOLs for MOOCs, a first edX scalable implementation Salzmann, Christophe; Piguet, Yves; Gillet, Denis

Evolution of teaching tools and the learning process: from traditional teaching to edX courses

Rodríguez-Sevillano, Ángel Antonio; Barcala-Montejano, Miguel Ángel; Tovar-Caro, Edmundo; López-Gallego, Pablo

Key Aspects of Integrating Augmented Reality Tools into Peer-to-Peer Remote **Laboratory User Interfaces** Maiti, Ananda; Kist,

2C: Short Papers

Poulova, Petra

Location: Ricardo Marin Chair: Katarina Zakova, SUT, Slovakia

A customizable platform for remotely teaching & learning LVDTs The relevance of using the IEEE1451.0 Std. to facilitate its design and access

Costa, Ricardo Jorge; Fernandes, Samuel; Jorge, Joni; Alves, Gustavo R.

An FPGA-based Remote Laboratory: **Implementing Semi-Automatic** Experiments in the **Hvbrid Cloud** Toyoda, Yuichi; Koike, Nobuhiko; Li, Yamin

Remote Software Laboratories: Facilitating access to **Engineering Softwares**

7:30pm

Welcome Reception at City Hall

García, Felix J.; de la

Torre, Luis; Dormido,

Sebastián

Plaza Mayor (Major Square) location and how to get there

9:30pm

http://www.rev-conference.org/REV2016/documents/Madrid_practical_infos.pdf

Cvjetkovic, Vladimir

Miodrag; Matijevic, Milan

Date: Thursday, 25/Feb/2016

8:30am	Registration opens
- 9:00am	
9:00am	DEMO 1: Interactive Demonstrations
- 10:30am	Location: Ricardo Marin and Florentino Sanz Chair: Maria Teresa Restivo, Faculty of Engineering of University of Porto
10.504111	Chair: Alberto Cardoso, University of Coimbra
	The Game and Activity Environment of RALfie
	Kist, Alexander A.; Maiti, Ananda; Maxwell, Andrew D.; Orwin, Lindy; Albion, Peter; Ting, Wu; Burtenshaw,
	Ryan
	GOLDi – Grid of Online Lab Devices Ilmenau
	Henke, Karsten; Vietzke, Tobias; Hutschenreuter, René; Wuttke, Heinz-Dietrich
	Labicom Labs: Remote and Virtual Solid-State Laser Lab, RF&Microwave Amplifier Remote and
	Virtual Lab (Interactive demonstration of Labicom labs in winter 2016) <u>Titov, Igor</u> ; Glotov, Alexander; Yelizarov, Andrey; Petrov, Victor
	Simple modular system "iSES Remote Lab SDK" for creation of remote experiments accessible from PC, tablets and mobile phones
	Lustig, Frantisek
	Demonstrating Active Noise Control and Acoustics experiments using real test setup via the
	Internet
	Khan, Imran; Claesson, Lena; Håkansson, Lars
	Virtual labs: a new tool in the Education
	<u>Fernández-Avilés Pedraza, Daniel</u> ; Dotor Jara, Diego; Contreras Masedo, Daniel; Salazar Calderón, Jose Carlos
	A Booth and Bl Charter and Cairer County County David and Name Association in the CO
	A Raspberry PI Cluster and Geiger Counter Supporting Random Number Acquisition in the CS Operating Systems Class
	Wolfer, James; Keeler, William J.
	Using Augmented Reality Smart Glasses to Design Games for Cognitive Training
	Chang, Yao-Jen; Liu, Hung-Huan; Kang, Ya-Shu; Chang, Yao-Sheng; Kao, Chia Chun
	ViPLab - an Online Programming Laboratory - Demo session
	Boehringer, David; Richter, Thomas
	Easy Creation and Deployment of Javascript Remote Labs with EjsS and Moodle
	de la Torre, Luis; Andrade, Tiago Faustino; Restivo, Maria Teresa; Sanchez, Jose
9:00am	IEEE EdSoc Standards Meeting Location: Andres Bello room
- 10:30am	Chair: Hamadou Saliah-Hassane, TELUQ - Université du QUÉBEC
10:30am	Coffee Break
- 11:00am	
11:00am	DEMO 2: Interactive Demonstrations
- 12:30pm	Location: Ricardo Marin and Florentino Sanz Chair: Alberto Cardoso, University of Coimbra
	Chair: Maria Teresa Restivo, Faculty of Engineering of University of Porto
	Live Demo of two Experiments using a Remote Lab for Forming Technology
	Ortelt, Tobias R.; Meya, Rickmer; Selvaggio, Alessandro; Chatti, Sami; Tekkaya, A. Erman
	Demonstration of a remote lab based on a vibrating beam apparatus
	Cardoso, Alberto; Sousa, Vitor; Restivo, Maria Teresa; Gil, Paulo
	Use of Virtual and Pocket Labs in Education
	Klinger, Thomas; Madritsch, Christian
	An Inclined Plane Remote Lab
	I control of the cont

<u>Cardoso de Lima, João Paulo;</u> Schardosim Simão, José Pedro; Bento da Silva, Juarez; Nardi da Silva, Isabela; Cadorin Nicolete, Priscila; da Mota Alves, João Bosco

A Tool for Grip Evaluation and Learning

Carneiro, Fernando; Santos, Bruno; Abreu, Paulo; Restivo, Maria Teresa

Displacement measurements versus time using a remote Inclined Plane laboratory

Claesson, Lena; Håkansson, Lars

Remotely Analyze Spine Angle in Rehabilitation After Spine Surgery using Acceleration and Gyro Sensors

Peulic, Aleksandar; Mijailovic, NIkola; Milankovic, Ivan; Jovanovic, Zeljko

Remote System for Measuring Geometric Tolerances: Roundness

Bajči, Brajan; Dudić, Slobodan; Šulc, Jovan; Milenković, Ivana; Šešlija, Dragan; Reljić, Vule

Augmented Reality for Cognitive and Social Skills Improvement in Children with ASD

Cunha, Pedro; Brandão, Jorge; Vasconcelos, José; Carvalho, Vitor; Soares, Filomena O.

Virtual environment for instrumented glove

Tavares, Rafael; Sousa, Pedro; Abreu, Paulo; Restivo, Maria Teresa

11:00am

IEEE EdSoc Standards Meeting

Location: Andres Bello room

Chair: Hamadou Saliah-Hassane, TELUQ - Université du QUÉBEC

12:30pm 12:30pm

-2:00pm 3A: Special Session: Reusable solutions for

Remote Laboratories Location: Salon de Actos Chair: Pablo Orduña, DeustoTech, University of Deusto

Chair: Danilo Zutin, CUAS

Experiment Lab Server Architecture: a Web Services Approach to Supporting Interactive LabVIEW-based Remote Experiments under MIT's iLab Shared Architecture

Mendes, Luciano A.; Li, Letitia; Bailey, Philip H.; DeLong, Kimberley R.; del Alamo, Jesus A.

The Mach-Zehnder
Interferometer - A
Smart Remote
Experiment Based on a
Software Template

<u>Halimi, Wissam;</u> Salzmann, Christophe; Gillet, Denis

Reusable Solutions for Embedded Systems' Design

Parkhomenko, Anzhelika; Gladkova, Olga; Sokolyanskii, Aleksandr; Shepelenko, Vladislav; Zalyubovskiy, Yaroslav

Remote framework for publishing distibuted RCLs

<u>Fortunato, João</u>; Lopes, Josue; Neto, Rui; Balula,

3B: Special Session: New Experiences and Strategies in Remote Laboratories and apps for Electronics

Location: Salon de Grados Chair: Javier Garcia-Zubia, University of Deusto Chair: Elio San Cristobal Ruiz, UNED

Reshaping digital methodologies to the analog world

Felgueiras, Manuel C.; Areias, Dinis; Fidalgo, André V.; Macedo, José; <u>Alves, Gustavo R.</u>

Remote laboratory for teaching of control systems design as an integrated system

Poliakov, Mykhailo; Larionova, Tetiana; Henke, Karsten; Tabunshchyk, Galyna; Parkhomenko, Anzhelika

Teaching through inquiry on vocational training: The IES San Juan de la Rambla experience, using an Inquiry Learning Space (ILS) and the LXI-VISIR Deusto

Rodríguez, Wilme

Remote diagnostics of remote laboratory – on example of Joule's experiment as a probe into microworld 3C: Special Session: Open Educational Resources and Competences related with Practices and Laboratories

Location: Fernandez Huertas Chair: Edmundo Tovar, Technical University of Madrid Chair: Oscar M Bonastre, Miguel Hernandez University

Turning the internet of (my) things into a remote controlled laboratory

Torres, André; Santos, Manuel; Balula, Samuel; <u>Fortunato, João</u>; Fernandes, Horacio

Bringing Egyptology to the Classroom: Virtual Reconstruction of the TT 209 Site

Gomez, Sacha; Molinero, Miguel Angel; Hernandez, Cristo; Mendez, Daniel; Naranjo, Tatiana; Diaz, Yolanda; Perez, Sofía; Acebo, Ainara; Molins, Pablo; Jurado, Francisco; R...

Evaluation of remote experiments by different target groups, NeReLa project case study

<u>Krneta, Radojka</u>; Rojko, Andreja; Restivo, Maria Teresa; Urbano, Diana

"Virtual" Algorithm Experimentation with Optimality

6 sur 9 16.02.16 11:27

Students in Indonesia Tundjungsari, Vitri 8:30pm Conference Social Cocktail

- Arte Canal cocktail and Cleopatra exhibition private session (near Plaza Castilla)

http://www.rev-conference.org/REV2016/documents/Madrid_practical_infos.pdf

Date: Friday, 26/Feb/2016

8:30am -	Registration opens						
9:00am	<u> </u>						
9:00am -	IAoE and GOLC Annual General Meetings Location: Andres Bello room						
10:30am	0 " 0 1						
10:30am - 11:00am	Coffee Break						
11:00am	5A: Open Innovation	5B: Short Papers	5C: Full Papers	5D: Full Papers			
11:00am - 12:30pm	Round Table Location: Salon de Actos Chair: Michael E. Auer, Carinthia University of Applied Sciences	Location: Salon de Grados Chair: Gabriel Diaz Orueta, UNED A distributed	Location: Ricardo Marin Chair: Mario A. Bochicchio, University of Salento Augmented Reality	Location: Florentino Sanz Chair: Pablo Orduña, DeustoTech, University of Deusto			
	The OnlineLabs4All Project from CUAS and Austrian Secondary Schools Zutin, Danilo; Auer, Michael	laboratory architecture for game-based learning in cybersecurity and critical infrastructures Cano, Jesus; Hernandez, Roberto; Ros, Salvador;	Environment for Engineering Distance Leaner in Acquiring Practical Skill Chennam Vijay, Venkatesh; Lees, Mel; Chima, Parmjit; Chapman,	Laboratories as a Service integrated into Learning Management Systems Tobarra Abad, Llanos Ros Muñoz, Salvador Pastor Vargas, Rafael			
Innovati Univers Kist, Ale The Flip Reimag Educati Next-Ge Laborat Córdoba	Examples of Open Innovation in the University Context Kist, Alexander A. The Flipped Lab:	Practical Application of the Learning Mechanics—Game Mechanics (LM-GM) framework for Serious Games Analysis in Engineering Education Callaghan, Michael James; McShane, Niall; Gómez Eguíluz, Augusto; Teillès, Thomas; Raspail, Pierre Extensive and repeatable experimentation in mobile communications with programmable instruments García Pérez, Cesar Augusto; Recio Pérez, Álvaro Manuel; Ríos Gómez, Álvaro; Díaz Zayas, Almudena; Merino Gómez, Pedro	Improving Mobile Communications Research and Education with UXM	Hernandez Berlincher Roberto; Castro, Manuel; Al-Zoubi, Abdullah Al; Dmour, Mamoun; Robles Gomez Cisco Pedro Pedro Pedro Pedro Pean Cisco Cloud-based Remo Virtual Prototyping Environment for Embedded Control Applications Werner, Stephan; Lauber, Andreas; Becker, Jürgen; Sax, Eric THE REMOTE EXPERIMENT			
	Reimagining Science Education with Next-Generation Virtual Laboratories Córdoba, Ainara López; Fakhri, Maaroof		Rivas Tocado, Francisco Javier; <u>Díaz Zayas</u> , <u>Almudena</u> ; Merino, Pedro The Role of Online				
			Labs in the European e-Science Infrastructure				
			Longo, Antonella; Zappatore, Marco; Tarantino, Donato Flexible Technologies for Smart Campus Tabunshchyk, Galyna; Van Merode, Dirk; Patrakhalko, Kostiantyn; Goncharov, Yuriy Pr m sn au er				
				COMPATIBILITY WITH INTERNET OF THINGS Samoila, Cornel; Ursutiu, Doru; Jinga, Vlad			
				Prototype of the modern hands-on smart lab for automation engineering Makarova, Yuliya;			
				Langmann, Reinhard			

2:00pm Chair:

Chair: **Doru Ursutiu**, "University ""Transilvania"" of Brasov, Romania"

Chair: Ricardo Mairal, UNED

Marquez-Barja, Johann M.

Remote Experimentation from Research to Education: A European Roadmap

Gaming Learning Analytics: how projects RAGE and BEACONING are improving serious games

	applicability		
0.00	Fernandez-Manjon, Baltasar	_	
2:00pm -	Lunch Break		
3:00pm			
3:00pm	eMadrid Open Project Presentations		
- 5:00pm	Location: Salon de Actos Chair: Manuel Castro, UNED		
·	http://www.emadridnet.org/en/seminario-emadrid-sobre-nuevas-experiencias-en-laboratorios-remotos-2016-02-26		
	15:00-15:45: Online Experimentation and New Experiences in Remote Laboratories. María Teresa Restivo, Universidad de Oporto.		
	• 15:45-16:30: Remote Labs and the Industry 4.0 project. Reinhard Langmann, University of Applied Sciences		
5:00pm	Farewell Coffee		
- 6:00pm			