

# 9th International Conference on Interactive Mobile Communication Technologies and Learning

# **IMCL2015**



# Organized by:





http://www.imcl-conference.org/imcl2015

19-20 November 2015, Thessaloniki, Greece

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# IMCL2015 - Keynotes

## Keynote 1: How Mobile Devices Can Change Our Educational Goals and Methods

David Guralnick, President of Kaleidoscope Learning, New York, NY, USA



Mobile devices are ubiquitous these days, and are only becoming more varied and more powerful each year. For people growing up today, mobile phones, tablets, and even wearable technology are a part of everyday life, much in the way that a television or a dial phone were for previous generations. As mobile devices change people's everyday lives, their educational needs and expectations change as well. In a world in which so many facts are available anytime from a Google search, it's easy to contact friends or family from anywhere, and many everyday tasks become easier and more efficient to perform, the skills people need to live a successful, productive, enjoyable life are changing as well. Further, people's

expectations of an educational experience have changed in many ways. In this session, we will discuss how the ubiquity of mobile technology can -and perhaps should- alter our educational goals and the methods we can use in order to achieve them.

## **Keynote 2: Database for Next Generation Mobile Technologies and Applications**

Mudasser F. Wyne, Professor at National University, San Diego, USA



Advances in mobile technology have a positive impact on fast, real-time and accurate ubiquitous availability and storage of data and media. This presentation will examine some of the ways we are addressing these challenges as well as highlight subjects that are either under or overemphasized in the area of Next Generation Mobile Technologies and Applications. It will highlight both the technology challenges as well the current industry solutions. New mobile devices place new and different demands on the traditional backend data store and persistence layers. The

back end of these devices and their related applications is always a database to maintain all of the essential and required information. The mobile environment with increased options also presents some of the limitations such as Limited resources including power supply and memory, constrained bandwidth of wireless networks with mobility and connection issues. In response to the desire to be connected all the time to the data back end we see new cloud based infrastructure (SaaS, laas) as well as intelligent cloud hosted application infrastructure such as Amazon web service. On the other hand as a result of this, the way the users are using and consuming backend data has changed. The presentation will examine the changes in the methodology and approach used for the storage and management of back data related to the application.

# Keynote 3: Engineering Digital and Mobile Learning for Professional Development, Employability and Economic Sustainability: Issues of Collaboration, Integration, Globalization and the Internet of Things

James Uhomoibhi, Professor at University of Ulster, Northern Ireland, United Kingdom



In today's era of globalization digital literacy and ability to use mobile devices (laptops, tablets, phones etc.) has become essential skills for all at home and in the work place. Higher education institutions continue to utilize digital learning to promote access, widen participation and enhance teaching and research. Learning has become mobile and access to instructional materials has been made possible utilizing not only the

traditional desktop computers but mobiles devices such as tablet personal computers such as iPads and smart phones. Universities today talk about taking on students to learn and prepare for the world of work little realizing that they are taking on students for life as the students thereafter become engaged in lifelong learning. This keynote address focuses on the engineering of digital and mobile learning for professional development, employability and economic sustainability of individuals, organizations and society. The role of education institutions and professional bodies are presented and the issues of collaboration and technology integration in education are addressed. Mobile devices' availability and ways of interaction for enhanced learning are explored

in the context of internet of things and online learning. There is a continuing crave by learners everywhere for access to information and education to enhance their knowledge and skills for better jobs and higher wages. This has led to the development and deployment of open source materials and massive open online courses (MOOCs). The keynote examines the processes involved in collaborations for the development of systems, qualifications and competencies useful for employment. We report on existing partnerships between organizations with a focus on professional computing qualifications from BCS, the Chartered Institute for IT. The benefits of current practice are discussed. This amongst others include increased employability and globally recognized professional qualifications in addition to the academic qualifications obtained from institutions. The challenges that mobile and e-learning present, which include assessments and standards are given brief mention. They form the subject for future work and a different paper. The advent and implementation of the internet of things is making knowledge creation and integration of technology in education and collaboration within and across disciplines possible. We conclude that collaboration between higher education institutions, professional organizations and industries stands to benefit not only learners, through achieving their educational aspirations but has the potential to meet the needs of industries and ensure sustained economic growth and development of society.

## Keynote 4: Shifting Paradigms in Medical/Health Education Informatics: From Digitisation and Standardisation to Open/Scenario based Learning and Analytics

Panagiotis Bamidis, Associate Professor, Medical School, Aristotle University of Thessaloniki, Greece



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# IMCL 2015 at a Glance

Place	Room A	Room B	Room C	Room A	Room B		
							Saturday
Time	Thursday 19 Nov 2015			Friday 20 Nov 2015			21 Nov 2015
8:00							8:00-16:30
8:30	Registration			Registration			Social Event
9:00	9:00-9:30 Opening Ceremony			9:00-11:00			Trip to Dion-Mt. Olympus
9:30	9:30-11:00			K3&4:			
10:00	K1&2:			Keynotes 3 & 4  Competition			
10:30	Keynotes 1 & 2			Winners			
11:00	11:00 -1	1:30 Coffee Bre	ak	11:00 -11:30 Coffee Break			
11:30	11:30 - 13:00	11:30 - 13:00	11:30 - 13:00	11:30 - 13:00	11:30 - 13:00		
12:00	MC A1	MC B1	DC	MC A3	MC B3		
12:30							
13:00	13:00-14:00 <b>Lunch</b>			12:00 14:00 Lumph			
13:30	13.0	00-14.00 <b>Lunch</b>		13:00-14:00 Lunch			
14:00	14:00 - 15:30	14:00 - 15:30	14:00 - 17:00	14:00 - 15:30	14:00 - 15:30		
14:30	MC A2	MC B2	Students'	MSGCI 2	MC B4		Bus stop at
15:00			Competition				Thessaloniki
15:30	15:30 - 17:00	15:30 - 17:00		15:30 - 17:00	15:30 - 17:00		airport
16:00	MSGCI 1	MSNTA		MSGCI 3	OL+ML		(about 16:00)
16:30							
17:00	17:00 -1	7:30 Coffee Bre	ak	 17:00 -17:30 Coffee Break			
17:30	17:30 - 19:00		17:00 - 19:00	17:30 - 19:00	17:30 - 19:00		
18:00	МНСТ	ITEL	Posters	MsM'2015	OASUSL		
18:30							
19:00	End of Day 1			End of	Day 2		
						1	
21:00	21:00 - 24:00						
24:00	Cor	ference Dinner				]	

# **Presentation Guidelines**

- Papers: Presentation time will be 15 minutes including questions and answers.
- Posters: The posters will be displayed the 1<sup>st</sup> day of the conference in the evening (during and just after the second coffee break). Each author is responsible for preparing his/her display. Stands (height: 94cm, width: 66cm.) and tape will be provided by the conference secretariat.
- The Conference rooms will be equipped with wi-fi, laptops and LCD projectors. The presenters should come prepared with presentation on flash drives.

# **IMCL2015 Program**

IMCL2015 program is also available for mobile devices through the **conference4me** application. To download the mobile app, please type '**conference4me**' in Google Play and iTunes App Store.

9:00am	Registration					
- 4:30pm	Location: IMCL Reception & Posters Area					
9:00am	OC: Opening Ceremony					
9:30am	<ul> <li>Location: Room A - "Zeus" Hall</li> <li>Welcome by the IMCL 2015 General Chair: Michael E. Auer, Carinthia Tech Institute</li> <li>Welcome by the Rector of AUTH: Periklis Mitkas, Aristotle University of Thessaloniki, Greece</li> <li>Welcome by the Dean of the Faculty of Sciences: Chariton - Charles Chintiroglou, Aristotle University Thessaloniki, Greece</li> </ul>					
	<ul> <li>Welcome by the Vice-Chairman of the School of Informatics: Eleftherios Angelis, Aristotle University of Thessaloniki, Greece</li> <li>Welcome by the IMCL 2015 Conference Chair: Thrasyvoulos Tsiatsos, Aristotle University of Thessaloniki, Greece</li> </ul>					
9:30am -	K1&2: Keynotes 1 and 2 Location: Room A - "Zeus" Hall					
11:00am	<ul> <li>Keynote 1: How Mobile Devices Can Change Our Educational Goals and Methods         David Guralnick, President of Kaleidoscope Learning, New York, NY, USA</li> <li>Keynote 2: Database for Next Generation Mobile Technologies and Applications         Mudasser F. Wyne, Professor at National University, San Diego, USA</li> </ul>					
11:00am - 11:30am	Coffee Break					
11:30am - 1:00pm	MC A1: Main Conference A1 Location: Room A - "Zeus" Hall Chair: Charalambos Christou, University of Nicosia, Nicosia, Cyprus; christou.c@unic.ac.cy	MC B1: Main Conference B1 Location: Room B - "Ifigenia" Hall Chair: Ioannis Stamelos, Aristotle University of Thessaloniki; stamelos@csd.auth.gr	Chair: Stavros Demetriadis, Aristotle			
	LectureMonkey – A Platform for Collaborative Mobile Lecture Capturing and e-Learning Publishing Jacob Paul Ukelson LectureMonkey, Israel	How does personality affect wiki-mediated learning? Panagiota Altanopoulou, Nikolaos Tselios University of Patras, Greece	University of Thessaloniki; sdemetri@csd.auth.gr DC-PC members:  • Anastasios Economides, University of Macedonia, Greece  • Charalampos Karagiannidis, University of Thessaly, Greece  • Dionisios Politis, Aristotle University of Thessaloniki, Greece			
	Interactive Storytelling and Mobile Augmented Reality Applications for Learning and Entertainment – A rapid prototyping perspective Dimitris Markouzis, Georgios Fessakis	Exploring cultural heritage landscapes in an interactive game-based learning application Giannis Boididis <sup>1</sup> , Fotis Lazarinis <sup>1</sup> , Vassilios S. Verykios <sup>1</sup> , Chris Panagiotakopoulos <sup>2</sup> 1: Hellenic Open University, Greece; 2: University of Patras, Greece	Augmented Reality for Supporting Inquiry Based Learning Simon Creane, Yvonne Crotty, Margaret Farren International Centre for Innovation and Workplace Learning, School of Education Studies, Dublin City University, Ireland			
	Learning Technology and Educational Engineering Lab, University of the Aegean, Greece	Serious+: A technology assisted learning space based on gaming	Girls and Science Education: Exploring Female Interests towards Learning with Serious			
	AR Stereoscopic Human Eye Examination App Carlos Soto <sup>1</sup> , Mario Vargas <sup>1</sup> , Alvaro Joffre Uribe Quevedo <sup>1</sup> , Norman Jaimes <sup>1</sup> , Bill Kapralos <sup>2</sup>	George Kalmpourtzis <sup>1</sup> , Michael Berthoix <sup>2</sup> , Lazaros Vrysis <sup>3</sup> 1: Aristotle University of Thessaloniki / Maskott, France; 2: Maskott, France; 3: Aristotle University of Thessaloniki	Games A Study of KS3 Girls in the North East of England Opeyemi Dele-Ajayi Think Physics, Northumbria Universit United Kingdom, United Kingdom			
	1: Mil. Nueva Granada University, Colombia; 2: Faculty of Business and Information Technology University of Ontario Institute of Technology, Oshawa, Toronto, Canada	Using digital learning technologies to bridge the gap between student expectations and experiences	Mobile learning: open topics, concept and design of a learning framework Panagiotis Stylianidis			

#### Date: Thursday, 19/Nov/2015 University of Portsmouth, United Greece Collaborative Learning using Kingdom **Pocket Labs** THE GROWTH: A quiz-based Thomas Klinger, Christian **User-oriented service** game for addressing growing Madritsch composition platforms Carinthia University of Applied population issues Sciences, Austria Aleksandar Dimov Dimov, Elitsa Charn Pisithpunth, Petros Lameras, Vasileva Peltekova, Eliza Petrova Pamela Kato, Andree Woodcock Stefanova, Dafinka Savova Miteva Coventry University, United Kingdom **Evaluation of OpenDelos online** Sofia University "St. Kliment Ohridski", video editing and publishing Bulgaria platform for MOOCs **Cognitive Training Supported** Hippokratis Apostolidis<sup>1</sup>, Thrasyvoulos Tsiatsos<sup>1</sup>, Pantelis by Information and **Communication Technologies** Balaouras<sup>2</sup>, Michalis Gatzonis<sup>2</sup> Agisilaos Chaldogeridis 1: Aristotle University of Thessaloniki, Aristotle University of Thessaloniki, Greece; 2: National and Kapodistrian Greece University of Athens, Greece 1:00pm Lunch 2:00pm 2:00pm Competition: 1st IMCL Student International Competition for Mobile Learning Apps Location: Room C - "Nafsika" Hall Chair: Andreas Pester, CUAS; pester@fh-kaernten.at 5:00pm Judges: David Guralnick, President of Kaleidoscope Learning, USA Chara Koutalou, Matrix-IT, Greece Petros Lameras, The Serious Games Institute, UK Petros Nikopolitidis, Aristotle University of Thessaloniki, Greece Ioannis Stamelos, Aristotle University of Thessaloniki, Greece Ilias Trohidis, Tero Consulting, Greece Robot-based mobile platform for programming learning Konstantinos Manousaridis<sup>1</sup>, Apostolos Mavridis<sup>2</sup> 1: Mediterranean College, Greece; 2: Aristotle University of Thessaloniki, Greece **Tactileo Map** George Kalmpourtzis Maskott, France **Amusing Museum** Athanasia Moschou, Theodoros Dimopoulos, Panagiotis Kotsikoris University of Macedonia, Greece **Quick Question - Minimalist Application to Improve In-class Interaction** Joanne Jie Yin Hwan Sunway University, Malaysia **BrailleOne** Paul D. Hatzigiannakoglou, Maria T. Kampouraki University of Macedonia, Greece CineMetro George Charistos, Charikleia Syrtari, Christos-Panagiotis Papazoglou, Kyriaki Paniskaki OSWinds Research Group, Greece Serious+: A technology assisted learning space environment based on gaming George Kalmpourtzis Maskott, France **Bio-feedback Application**

Aikaterini Katmada, Michalis Chatzakis, Hippokratis Apostolidis, Apostolos Mavridis, Panagiotis Stylianidis

Aristotle Univercity of Thessaloniki, Greece

2:00pm - 3:30pm	MC A2: Main Conference A2 Location: Room A - "Zeus" Hall Chair: Thomas Klinger, Carinthia University of Applied Sciences; t.klinger@fh-kaernten.at	MC B2: Main Conference B2 Location: Room B - "Ifigenia" Hall Chair: George S. Ioannidis, University of Patras; asioanni@upatras.gr		
	Y.S.Y.D. – You Stay You Demand: User-Centered Design approach for Mobile Hospitality Application  Micaela Esteves <sup>1</sup> , Angela Pereira <sup>2</sup>	Designing Eco-apps to Engage Adult Learners  Eli Typhina  North Carolina State University, United States of America		
	1: Polytechnic Institute of Leiria, Portugal; 2: Polytechnic Institute of Leiria, Portugal	A novel system architecture for efficient management of skiing injuries		
	Gamification Designs in Wearable-technology Enhanced Learning for Healthy Ageing	Sule Yildirim, Yang Du, <u>Fisnik Dalipi</u> , Jonas Jeppesen Gjøvik University College, Norway		
	Ilona Buchem <sup>1</sup> , Agathe Merceron <sup>1</sup> , Jörn Kreutel <sup>1</sup> , Marten Haesner <sup>2</sup> , Anika Steinert <sup>2</sup> 1: Beuth Hochschule für Technik Berlin, Germany; 2: Charité Universitätsklinikum Berlin	Cochlear implants and wireless connectivity - Inner core Connectivity cradling into the 2.4 GHz Arena		
	Mobile Crowd Sensing-based Noise Monitoring as a Way to Improve Learning Quality on Acoustics	Dionysios B Politis <sup>1</sup> , Miltiadis Tsaligopoulos <sup>2</sup> , Georgio Kyriafinis <sup>2</sup> , Panteleimon Chriskos <sup>1</sup> , Nikolaos Chriskos <sup>1</sup> : Aristotle University of Thessaloniki, Greece; 2: 1st Academic ENT Department AHEPA University Hospital Thessaloniki Greece; 3: Bioclinic Thessaloniki Greece		
	Marco Zappatore, Antonella Longo, Mario A. Bochicchio, Daniele Zappatore, Alessandro A. Morrone, Gianluca De Mitri	Effective English for Industrial Engineering Students		
	University of Salento, Italy	Christina Merl		
	Data Analytics Support for Inquiry Based Learning	TalkShop.cc, Austria		
	<u>Dafinka Savova Miteva</u> , Nikolina Ilieva Nikolova, Eliza Petrova Stefanova Sofia University, Bulgaria	Everyday devices taught and explained to primary school children by following the energy transformations, using web-based software		
		Despina M. Garyfallidou, George S. Ioannidis University of Patras, Greece		
	Mobile Learning and Biotechnology Education via Remote Labs: Deployment-based study on Real Time Shared Resources	of all as, Greece		
	Dhanush Kumar <sup>1</sup> , Hemalatha Sasidharakurup <sup>1</sup> , Rakhi Radhamani <sup>1</sup> , Nijin Nizar <sup>1</sup> , Krishnashree Achuthan <sup>2</sup> , Bipin Nair <sup>1</sup> , <u>Shyam Diwakar</u> <sup>1</sup>			
	1: Amrita School of Biotechnology, Amrita Vishwa Vidyapeetham (Amrita University), Amritapuri, Clappana P.O., Kollam, Kerala, 690 525, India; 2: Amrita School of Engineering, VALUE, Amrita Vishwa Vidyapeetham (Amrita University), TBI Building, Amritapuri, Clappana P.O., Kollam, Kerala, 690 525, India			
3:30pm -	MSGCI 1: Special Session "Mobile Serious Games for Creativity, Cognition and Innovation" Part 1 Location: Room A - "Zeus" Hall	MSNTA: Special Session "Mobile Social Networking Technologies and Applications" Location: Room B - "Ifigenia" Hall		
5:00pm	Chair: Daphne Economou, University of Westminster; D.Economou@westminster.ac.uk	Chair: Despo Ktoridou, University of Nicosia; ktoridou@cytanet.com.cy		
	A Mobile Serious Game for Lifestyle Change: Conveying nutritional knowledge and motivation through play	Student Generated Content in Higher Education Technology-related Blogs <u>Despo Ktoridou</u> , Elli Doukanari		
	lan Dunwell Coventry University, United Kingdom	University of Nicosia, Cyprus		
	Creative Thinking Experimentations for Entrepreneurship with A Disruptive,	Cypriot Firms, Social Media & User Generated Content Platforms		
	Personalised and Mobile Game-based Learning Ecosystem	Charalambos Stefanou Christou, Despo Ktoridou, Apostolos Papatheocharous, Florent Domenach University of Nicosia, Nicosia, Cyprus		
	Petros Lameras <sup>1</sup> , Thrasyvoulos Tsiatsos <sup>2</sup> , Despina			

# Date: Thursday, 19/Nov/2015

Anastasiadou<sup>3</sup>, Dimitris Tolis<sup>4</sup>, Fotis Liarokapis<sup>5</sup>, Aristidis Protopsaltis<sup>6</sup>, Panagiotis Petridis<sup>7</sup>, Maurice Hendrix<sup>1</sup>, Sylvester Arnab<sup>1</sup>

1: Coventry University, United Kingdom; 2: Aristotle University; 3: Innovation Academy; 4: Human Asset; 5: Masaryk University; 6: Friedrich-Alexander-Universität; 7: Aston University

The Implementation of Cardiopulmonary Resuscitation Training Using Mobile Uploads, Gamification and Direct Feedback Manikins: A Study in Sixth Form Students

Roxanne Applegate<sup>1</sup>, Deborah Aitken<sup>2</sup>, Todd Chang<sup>3</sup>, Ralph MacKinnon<sup>2,4</sup>

1: The University of Manchester, Manchester, UK; 2: Royal Manchester Children's Hospital, Manchester, UK; 3: Children's Hospital of Los Angeles, USA; 4: Karolinska Institutet, Sweden

# Edu-simulation: a serious games platform designed to simulate a teaching environment

<u>Daphne Economou</u><sup>1</sup>, Ioannis Doumanis<sup>2</sup>, Vassiliki Bouki<sup>1</sup>, Frands Pedersen<sup>1</sup>, Markos Mentzelopoulos<sup>1</sup>, Nektarios Georgalas<sup>3</sup>

1: University of Westminster, London, United Kingdom; 2: CTVC Ltd, London, United Kingdom; 3: BT Intel Co-lab British Telecom Ipswich, UK

# Digital game creation as a creative learning activity

Margarida Romero<sup>1</sup>, Niki Lambropoulos<sup>2</sup>

1: Université Laval; 2: London South Bank University

# Green@CU: An environmental game for Residential Accommodation

<u>Panagiotis Petridis</u><sup>1</sup>, Fotis Liarokapis<sup>3</sup>, Petros Lameras<sup>2</sup>, Maurice Hendrix<sup>2</sup>, Ian Dunwell<sup>2</sup>, Anastasios Babaoukas<sup>4</sup>, Elise Smithson<sup>2</sup>, Mark Gaterell<sup>5</sup>

1: Aston University, United Kingdom; 2: Coventry University,United Kingdom; 3: Masaryk University, HCI Lab, Brno, CZ; 4: University of Northampton, Northampton, UK; 5: University of Portsmouth, Portsmouth, UK

#### An F1 Mobile Application

Andreas Savva, <u>Spyros Hadjidakis</u>, Florent Domenach, Vasso Stylianou

University of Nicosia, Cyprus

### PASS – a Programming Assignment Submission System

### Florent Domenach, George Portides

University of Nicosia, Cyprus

## **Graphing Equations in Economics**

Andreas Savva, <u>Spyros Hadjidakis</u>, Vasso Stylianou University of Nicosia, Cyprus

#### Felt - A Social Feeling App

Florent Domenach, Pooya Charmarai, Andreas Savva, Charalambos Christou

University of Nicosia, Cyprus

Aristidis.Protopsaltis@ili.fau.de

5:00pm - 5:30pm	Coffee Break		
5:00pm - 7:00pm	Posters: Posters Location: IMCL Reception & Posters Area		
7.00pm	Constantine Capital of Arab Culture for 2015 Reda Yacini, Yahia Belayadi, Larbi Selmani, Djamel Boubetra Université de la formation Continue, Algeria  Mobile in support of a system of education: between presence and ubiquity Giorgio Poletti Università di Ferrara, Italy		
5:30pm - 7:00pm	MHCT: Special Session "Mobile Health Care and Training" Location: Room A - "Zeus" Hall Chair: Panagiotis Bamidis, Aristotle University of Thessaloniki; bamidis@med.auth.gr	ITEL: Special Session "Immersive Technologies for Effective Learning"  Location: Room B - "Ifigenia" Hall  Chair: Yevgeniya Sulema, National Technical University of Ukraine "Kyiv Polytechnic Institute"; sulema@pzks.fpm.kpi.ua  Chair: Aristidis Protopsaltis, Friedrich-Alexander-Universität;	

Real-time Health Monitoring and Contextualised

Alerts Using Wearables

# Date: Thursday, 19/Nov/2015

# <u>Thanos G. Stavropoulos</u>, Georgios Meditskos, Stelios Andreadis, Ioannis Kompatsiaris

Centre For Research & Technology Hellas, Greece

# A Preliminary Study on Fall Risk Evaluation through Electromiography Systems

Gabriele Rescio, <u>Alessandro Leone</u>, Andrea Caroppo, Pietro Siciliano

CNR-IMM, Italy

# MyAirCoach: Designing a mobile application for the education of patients regarding asthma disease

# Dimitrios Kikidis, Konstantinos Votis, <u>Dimitrios</u> Tzovaras

Information Technologies Institute, Centre of Research & Technology - Hellas, Thessaloniki, Greece

#### Sensor-based In-home Monitoring of People with Dementia Using Remote Web Technologies

<u>Anastasios Karakostas</u><sup>1</sup>, loulietta Lazarou<sup>1</sup>, Georgios Meditskos<sup>1</sup>, Thanos G. Stavropoulos<sup>1</sup>, loannis Kompatsiaris<sup>1</sup>, Magda Tsolaki<sup>2</sup>

1: Information Technologies Institute, Centre for Research and Technology Hellas; 2: 3rd Department of Neurology, Medical School, Aristotle University of Thessaloniki Greece

# The Future of Mobile Health ADHD Applications

Niki Pandria, <u>Dimitris G Spachos</u>, Panagiotis Bamidis Aristotle University of Thessaloniki, Greece

## Transfering Full Body Exergames from Desktop Applications to Mobile Devices: the Role of the Internet of Things

# <u>Evdokimos I Konstantinidis</u>, Giorgos Bamparopoulos, Panagiotis D Bamidis

Aistotle University of Thessaloniki, Greece

# Towards a Quantified-Self web application for seniors' self-tracking

Asterios Mpatziakas, <u>Antonis Billis</u>, Panagiotis Bamidis Lab of Medical Physics, Aristotle University of Thessaloniki, Greece

## Haptic Interaction in Educational Applications Yevgeniya Sulema

National Technical University of Ukraine "Kyiv Polytechnic Institute", Ukraine

# Olfactory Media Impact on Task Performance: The Case of a Word Search Game

Gheorghita Ghinea<sup>1</sup>, Oluwakemi Ademoye<sup>2</sup>

1: Brunel University; 2: University of Wales

## Hi kids: that's funny! Mechanics 3D Virtual lab Maria Teresa Restivo, Diana Urbano, Maria de Fátima Chouzal

Laeta-INEGI, Faculty of Engineering, University of Porto

# Perceptually captured gesture interaction with immersive information retrieval environments.

<u>Markos Mentzelopolous</u><sup>1</sup>, Jeffrey Michael Ferguson<sup>1</sup>, Dr. Aristidis Protopsaltis<sup>2</sup>

1: University of Westminster, United Kingdom; 2: Institute for Innovation in Learning Friedrich-Alexander-University Erlangen-Nuremberg

# Application of Immersive Technologies for Education: State Of The Art

Péter Tamás Kovács<sup>1</sup>, Niall Murray<sup>2</sup>, Gregor Rozinaj<sup>3</sup>, Yevgeniya Sulema<sup>4</sup>, <u>Renata Rybarova</u><sup>3</sup>

1: Holografika; 2: Athlone Institute of Technology; 3: Slovak University of Technology; 4: National Technical University of Ukraine "Kyiv Polytechnic Institute", Ukraine

# Multilingual and Multisensorial Dictionary Tool as a Support for the Effective Learning in the Area of ICT

<u>Peter Truchly</u><sup>1</sup>, Pavol Podhradský<sup>1</sup>, Marek Nevosad<sup>2</sup>, Tomáš Zeman<sup>2</sup>

1: Slovak University of Technology, Slovak Republic; 2: Czech Technical University, Czech Republic

# Implementation and evaluation of a game using natural user interfaces in order to improve response time

<u>Nikolaos Politopoulos</u>, Euthimios Ziagkas, Georgios Grouios, Thrasyvoulos Tsiatsos

Aristotle University of Thessaloniki, Greece

#### 9:00pm

## **Conference Dinner**

11:30pm | Location: NI

Location: **Kitchen Bar** Kitchen Bar, Thessaloniki

Conference Dinner at La Place Mignonne, the Best Paper Awards Ceremony will be held.

Please see "How to reach the Conference Dinner Venue" at page 23.

Date: Fri	te: Friday, 20/Nov/2015				
9:00am					
- 5:00pm	Location: IMCL Reception & Posters Area				
-	V29.4. Voymetee 2 and 4. Competition Winners				
9:00am -	K3&4: Keynotes 3 and 4 - Competition Winners Location: Room A - "Zeus" Hall				
11:00am	<ul> <li>Keynote 3: Engineering Digital and Mobile Learning for Professional Development, Employability and Economic Sustainability: Issues of Collaboration, Integration, Globalization and the Internet of Things James Uhomoibhi, Professor at University of Ulster, Northern Ireland, United Kingdom</li> </ul>				
	Keynote 4: Shifting Paradigms in Medical/Health Education Informatics: From Digitisation and Standardisation to Open/Scenario based Learning and Analytics     Panagiotis Bamidis, Associate Professor, Medical School, Aristotle University of Thessaloniki, Greece				
	Reward of the winners of the 1st IMCL Student International Competition for Mobile Learning Apps				
11:00am					
- 11:30am	Coffee	e Break			
11:30am	MC A3: Main Conference A3	MC B3: Main Conference B3			
	Location: Room A - "Zeus" Hall	Location: Room B - "Ifigenia" Hall			
1:00pm	Chair: Mario A. Bochicchio, University of salento; mario.bochicchio@unisalento.it	Chair: Christos Bouras, University of Patras and Computer Technology Institute & Press; bouras@cti.gr			
	Introducing an innovative robot-based mobile platform for programming learning	Role of Biotechnology Simulation and Remotely Triggered Virtual labs in Complementing University Education			
	Konstantinos Manousaridis <sup>1</sup> , Apostolos Mavridis <sup>2</sup> , Gregory Kalogiannis <sup>2</sup> , Konstantinos Anagnostopoulos <sup>1</sup> 1: Mediterranean College, Greece; 2: Aristotle University of	Rakhi Radhamani <sup>1</sup> , Hemalatha Sasidharakurup <sup>1</sup> , Dhanush Kumar <sup>1</sup> , Nijin Nizar <sup>1</sup> , Krishnashree Achuthan <sup>2</sup> ,			
	Thessaloniki, Greece	Bipin Nair <sup>1</sup> , Shyam Diwakar <sup>1</sup> 1: Amrita School of Biotechnology, Amrita Vishwa Vidyapeetham (Amrita University), Amritapuri, Clappana			
	Development of a mobile wind laboratory for teaching purposes in emerging countries	P.O., Kollam, Kerala, 690 525, India; 2: Amrita School of			
	Jens Palacios Neffke Technische Universität Berlin, Germany	Engineering, VALUE, Amrita Vishwa Vidyapeetham (Amrita University), TBI Building, Amritapuri, Clappana P.O., Kollam, Kerala, 690 525, India			
	Using the latest developments in mobile technology to improve students' engagement with assessment feedback.	Raising safer internet awareness through a mobile application based on contrasting visual stories			
	Carolyne Jacobs, Michael Wilson, Charles Barker University of Portsmouth, United Kingdom	Fotis Lazarinis <sup>1</sup> , Kyriaki Alexandri <sup>2</sup> , Vassilios S. Verykios <sup>1</sup> , Chris Panagiotakopoulos <sup>3</sup> 1: Hellenic Open University, Greece; 2: Ministry of			
	Digital storytelling with locative media in museum education: when the student becomes	Education, Karystos, Greece; 3: University of Patras, Greece			
	the author of the museum experience	E-learning as a tool for improving access to			
	Zoi Tsiviltidou University of Leicester, UK	academic education in the opinion of University of Gdansk students and teachers			
	A mobile app for emergency contraception awareness and education	Grazyna Chaberek-Karwacka, Miroslawa Malinowska University of Gdansk, Poland			
	Dilzayn Panjwani <sup>1</sup> , Emilian Cioca <sup>2</sup> , Brandon J. Drenikow <sup>2</sup> , Cameron M. Chodan <sup>2</sup> , Terry Fong <sup>2</sup> , Stephen Li <sup>2</sup> , <u>Bill Kapralos</u> <sup>2</sup> , Sheila Dunn <sup>3</sup>	Task Suitability and Multimedia Interaction at the 2.4 GHz Arena for Educational Purposes - The Impetus for Usability vs Cost Effectiveness			
	Women's College Research Institute, Toronto, Canada.;     University of Ontario Institute of Technology, Oshawa, Canada; 3: Women's College Hospital, Toronto, Canada.	Dionysios B Politis <sup>1</sup> , Miltiadis Tsaligopoulos <sup>2</sup> 1: Aristotle University of Thessaloniki, Greece; 2: AHEPA University Hospital, Aristotle University of Thessaloniki			
		A Mobile Learning Application for Self- Management of Health and Disease			
		Christos Bouras <sup>1</sup> , Vaggelis Kapoulas <sup>1</sup> , Nikos Karacapilidis <sup>2</sup> , Vasileios Kokkinos <sup>2</sup> , Andreas Papazois <sup>2</sup> 1: University of Patras and Computer Technology Institute & Press-Diophantus, Greece; 2: University of Patras, Greece			

Date: Fri	day, 20/Nov/2015		
		Spatio-Textual technology: the future of web search  Medjon Hysenaj <sup>1</sup> , Elira Hoxha <sup>2</sup> 1: University of Shkoder, Albania; 2: University of Tirana, Albania	
1:00pm - 2:00pm	Lunch		
2:00pm - 3:30pm	MSGCI 2: Special Session "Mobile Serious Games for Creativity, Cognition and Innovation" Part 2 Location: Room A - "Zeus" Hall Chair: Ian Dunwell, Coventry University; dunwell.i@gmail.com	MC B4: Main Conference B4 Location: Room B - "Ifigenia" Hall Chair: Dionysios B Politis, Aristotle University of Thessaloniki; dpolitis@csd.auth.gr	
	Gamification Design Framework Based on SDT for Student Motivation <u>Dimitra Lamprinou</u> , Fotini Paraskeva  University of Piraeus, Greece	Examining the interrelation between Interaction Analysis and Learning Styles in blog-based collaborative learning activities: The case of the G.I.AN.T. toolkit  Nikos Michailidis, Victoria Chondrouli, Aikaterini Katmada, Nikos Politopoulos  Aristotle University of Thessaloniki, Greece	
	CyberAware: A Mobile Game-based app for Cybersecurity Education and Awareness		
	Filippos Giannakas, Georgios Kambourakis, Stefanos Gritzalis University of the Aegean, Greece	10 User Interface Elements for Mobile Learning Application Development	
	Using mobile learning games for delivering purposes in Humanities	Khairul Yusri Zamri, Nada Nasser AL Subhi Brunel University, United Kingdom	
	Lamprini Tseliki <sup>1</sup> , Vassiliki Bouki <sup>2</sup> , <u>Daphne Economou</u> <sup>2</sup> 1: Lefkara, High School, Cyprus; 2: University of Westminster, United Kingdom	Remote Interactive Mobile Learning - Application in Electronics Learning  Adda Benattia Abderrahmane <sup>1</sup> , Benachenhou  Abdelhalim <sup>2</sup>	
	Designing a gamified News Reader for mobile devices.	1: University of Tiaret, Algeria; 2: University of Mostaganem, Algeria	
	Catherine Sotirakou, Constantinos Mourlas University of Athens, Greece	Engaging end-users in creating data-intensive mobile applications: A creative 'e-learning-by-doing' approach	
	Small and flexible web based framework for teaching QR and AR mobile learning application development.	Katerina Tzafilkou <sup>1</sup> , Adamantia Chouliara <sup>1</sup> , Nikolaos Protogeros <sup>1</sup> , Charalampos Karagiannidis <sup>2</sup> , Adamantic Koumpis <sup>3</sup> 1: University of Macedonia, Greece; 2: University of Thessaly, Greece; 3: University of Passau, Germany	
	Jeffrey Ferguson <sup>1</sup> , Markos Mentzelopoulos <sup>2</sup> , Aristidis Protopsaltis <sup>3</sup> , Daphne Economou <sup>4</sup> 1: Westminster University; 2: Westminster University; 3:		
	Friedrich-Alexander-Universität, Germany; 4: Westminster University	Spatial evaluation for data inconsistency  Medjon Hysenaj <sup>1</sup> , Elira Hoxha <sup>2</sup> 1: University of Shkoder, Albania; 2: University of Tirana, Albania	
3:30pm - 5:00pm	MSGCI 3: Special Session "Mobile Serious Games for Creativity, Cognition and Innovation" Part 3 Location: Room A - "Zeus" Hall Chair: Petros Lameras, Coventry University;	OL + ML: Special Session "Online Labs and Mobile Learning"  Location: Room B - "Ifigenia" Hall  Chair: Samir Akhrouf, University of Bordj Bou Arreridj/eSience	
	PLameras@cad.coventry.ac.uk  Towards the Gamification of Inquiry-Based Flipped Teaching of Mathematics - A Conceptual Analysis and Framework  Petros Lameras <sup>1</sup> , Nektarios Moumoutzis <sup>2</sup>	Tempus Project Partner; samir.akrouf@gmail.com  Secure Fingerprint-based authentication and non-repudiation services for mobile learning systems  Foudil Belhadj¹, Samir Akrouf², Samy Ait aoudia¹	
	1: Serious Games Institute (SGI), Coventry University, UK; 2: Technical University of Crete / Laboratory of Distributed Multimedia Information Systems and Applications (TUC/MUSIC), Chania, Greece	1: Ecole Inetrnationale Supérieure d'Informatique, Algeria; 2: Université Mohamed Elbachir Elibrahimi, Bordj Bou Arréridj, Algeria	
	Towards an Ontology-driven Game-based Educational Platform with Automatic Students	BBA Virtual Laboratory through M-Learning Adel Merabet, Samir Akhrouf, <u>Djamel Boubetra</u> , Foudil Belhadj, Larbi Selmani, Abdelhack Boubetra	

Date: Friday, 20/Nov/2015

#### Monitorina University of Bordj Bou Arreridj, Algeria Sarah Malaeb, Aiman Erbad, Jihad M. AlJa'am Department of Computer Science and Engineering, Qatar Trust and Forgiveness in Virtual Teams: A Case University, Qatar Study in Algerian E-Learning Context Meriem Laifa<sup>1</sup>, Roya Imani Giglou<sup>2</sup>, Samir Akhrouf<sup>1</sup>, Ramdane Maamri Treasure hunt pervasive games in cultural 1: Computer science Faculty at Bordj Bou Arreridj organisations University, Algeria, 2: Institute for media studies at the <u>Daphne Economou</u><sup>1</sup>, Vassiliki Bouki<sup>1</sup>, Thanos Kounenis<sup>1</sup>, Markos Mentzelopoulos<sup>1</sup>, Nektarios Georgalas<sup>2</sup> Catholic University of Leuven, Belgium; 3: Computer science Faculty at Constantine 2 University, Algeria 1: University of Westminster, United Kingdom; 2: British Telecom, United Kingdom Dihya: an Intelligent Learning Object Repository Rouabah Abdelbasset, Selmani Larbi, Belayadi Yahia Université de la formation Continue, Algeria Gamedec.UKW: A Case of Edu-Gamification for **Game Designers** Michal Mochocki Design of remote electronic laboratory Kazimierz Wielki University in Bydgoszcz, Poland Hakima Mostefaoui, Abdelhalim Benachenhou University of Mostaganem, Algeria An Adaptive Serious Neuro-game using a Mobile version of a Bio-feedback device Aikaterini Katmada, Michalis Chatzakis, Hippokratis Apostolidis, Apostolos Mavridis, Stylianidis Panagiotis Aristotle University of Thessaloniki, Greece 5:00pm **Coffee Break** 5:30pm MsM'2015: Special Session "Motivating Students with OASUSL: Special Session "Online Applications for 5:30pm Mobiles" Supporting University Students' Learning" Location: Room A - "Zeus" Hall Location: Room B - "Ifigenia" Hall 7:00pm Chair: Anastasios A. Economides, University of Macedonia; Chair: Jenny Pange, University of Ioannina; jennypagge@yahoo.gr economid@uom.gr Supporting undergraduate University's students The effects of Perceived Mobility and MvCourse Aplication Satisfaction on the adoption of Mobile-based Rodanthi {Rozita} Tsoni<sup>1</sup>, Jenny Pange<sup>2</sup> **Assessment** 1: University of Ioannina, Greece; 2: University of Ioannina, Stavros A. Nikou, Anastasios A. Economides University of Macedonia, Greece Supporting undergraduate students via mSchools Programme. A new way of teaching Webinars Athanasios Sypsas<sup>1</sup>, Eugenia Toki<sup>2</sup>, Jenny Pange<sup>1</sup> and learning. 1: University of Ioannina, Greece; 2: TEI of Epirus, Greece Jordi Vivancos Martí<sup>1</sup>, Roser Cussó Calabuig<sup>1</sup>, Albert Forn Palacín<sup>2</sup> 1: Department of Education. Generalitat of Catalonia, Spain; What ICT tools use the undergraduate students? 2: Associate Director GSMA Jenny Pange, Aspa Lekka University of Ioannina, Greece Speaky Notes: learn languages with AR Fabio Sorrentino, Lucio Davide Spano, Riccardo NEW TRENDS OF ICT IN EDUCATION Scateni Aspa Lekka, Maria Tsironi, Jenny Pange University of Cagliari, Italy University of Ioannina, Greece Students' Readiness for Mobile Learning in The urge for GREEN IT courses at Universities Republic of Yemen - a Pilot Study and Technical Institutes Georgi Tuparov<sup>1,2</sup>, Abdulrahman Al Sabri<sup>1</sup>, Dniela Evangelos Evangelou, Jenny Pange Tuparova<sup>1</sup> University of Ioannina, Greece 1: South-West University "Neofit Rilski", Bulgaria; 2: Bulgarian Academy of Sciences, Institute of Mathematics and Informatics, Sofia SuperAvatar: Children and mobile tourist guides become friends using superpowered avatars Fabio Sorrentino, Lucio Davide Spano, Riccardo Scateni University of Cagliari, Italy

# Date: Saturday, 21/Nov/2015

8:00am Social Program

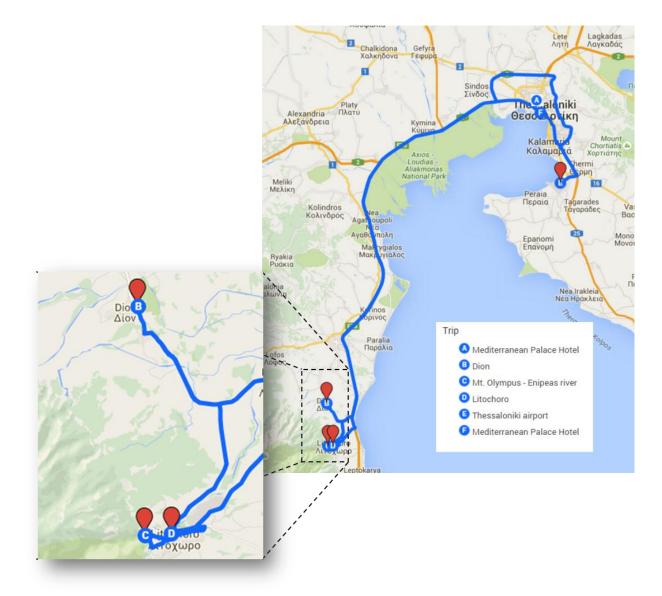
**Location: Lobby of Mediterranean Palace Hotel** 

4:30pm Half-day (08:00-16:30) tour in the Olympus Mountain and a visit to the Archaeological Museum of Dion.

Program:

- A. Departure from Thessaloniki, in front of Mediterranean Palace Hotel (conference venue)
- B. Conducted visit to the Archaeological Museum of Dion (ticket included in the social program fee).
- C. Visit at Olympus Mountain and walking tour next to Enipeas river
- D. Lunch at Litochoro village
- E. Bus stop at Thessaloniki airport (about 16:00)
- F. Arrival at Mediterranean Palace Hotel (conference venue)

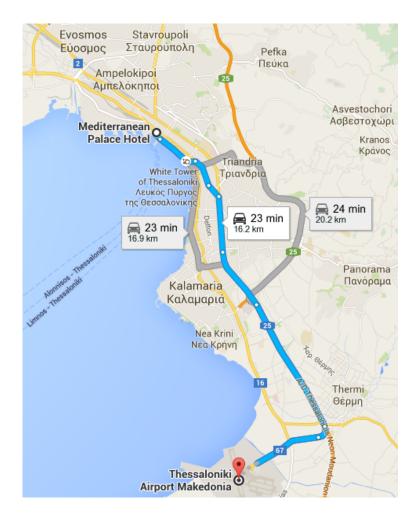
More details about the trip are available at the following map (https://goo.gl/JLLuxb):



## How to reach the Conference Venue

All conference sessions, coffee and lunch breaks will be held at the **Mediterranean Palace Hotel**, Thessaloniki, Greece.

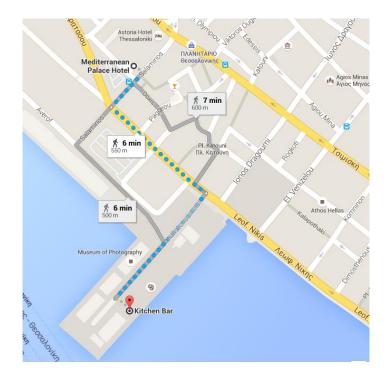
The participants, are advised to use this map: https://goo.gl/maps/jVIA5 (also presented below), in order to find instructions for reaching the Mediterranean Palace Hotel from the Thessaloniki Airport "Makedonia".



## How to reach the Conference Dinner Venue

The conference dinner will be held at **Kitchen Bar** on **Thursday 19 November 2015 from 21:00 to 24:00**. Kitchen Bar is a quiet and relaxing place, very close to the conference venue, in the old Port! Participants attending the conference dinner will taste a menu with local dishes. Vegeterian and non-pork dishes will be also included. Moreover, during conference dinner at Kitchen Bar, the **Best Paper Awards Ceremony** will be held.

The participants are advised to use the following map in order to find instructions for reaching the Kitchen Bar.



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