Contents

Chair's Welcome Message

Welcome to the Smart Digital Futures 2016 (SDF-16) multi-theme conference, held in Puerto de la Cruz, on the island of Tenerife, the Canaries, Spain, on 15-17 June 2016.

SDF-16 is an amalgamation of five KES conferences: Agent and Multi-Agent Systems - Technology and Applications (KES-AMSTA-16), Intelligent Decision Technologies (KES-IDT-16), Intelligent Interactive Multimedia Systems and Services (KES-IIMSS-16), Innovation in Medicine and Healthcare (KES-InMed-16) and Smart Education and e-Learning (KES-SEEL-16). Although the conferences share a common venue, and social programme, each one has its own chair, international programme committee, and proceedings published by Springer-Verlag. Delegates registered for SDF-16 may attend sessions from any of the conferences and mix with the communities of the others.

Smart Digital Futures was organised as part of the KES International conference portfolio. For over a decade the mission of KES International has been to provide a professional community, networking and publication opportunities for all those who work in knowledge-intensive subjects. At KES we are passionate about the dissemination, transfer, sharing and brokerage of knowledge. The KES community consists of several thousand experts, scientists, academics, engineers, students and practitioners who participate in KES activities. KES runs conferences in different countries of the world on leading edge topics including Intelligent Systems, Sustainability in Energy and Buildings, Innovation, Knowledge Transfer and Enterprise, and Digital Media. KES provides routes to publication, such as journals, book series, and online publications, both through its own media and in conjunction with major publishers. KES also provides knowledge transfer services and consultancy.

The aim of Smart Digital Futures was to bring together researchers working at the leading edge of developments in smart systems and intelligent technology theory and applications. This programme contains about 260 papers, each selected after full peer review by members of the International Programme Committees of the conferences.

We thank the four keynote speakers for providing informative accounts of the latest research in their areas: Jair M. Abe, University of Sao Paulo & Paulista University, Brazil; Antonio Fernández-Caballero, Universidad de Castilla-La Mancha, Spain; Mauro Gatti, IBM, Italy; and Vladimir Uskov, Bradley University, USA

We thank the General Chairs and Programme Chairs of the SDF-16 conferences for their hard work and dedication. We appreciate the efforts of those organising and chairing special sessions, members of the International Programme Committees and

reviewers and we thank them. We are grateful to authors for the papers they have contributed to the conference, and to delegates for their attendance and we give them our thanks.

Finally we thank the conference administration for their organisational efforts, and the people of Puerto de la Cruz for welcoming us to their city.

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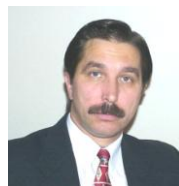
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Social Events

Wednesday 15 June
Excursions

On the evening of Wednesday 15th June, there will be an additional social event. This will feature a guided tour of the beautiful historical town La Laguna followed by a wide selection of drinks and food at a stunning location.

After a short scenic coach drive following the green north coast, we'll discover La Laguna - the former capital of the island!

Its full name is Ciudad de San Cristobal de la Laguna (Saint Christopher). It is the cultural and religious centre of the island, as it is the home of La Laguna University and of the Diocese Nivariense, Tenerife's old name. Its historic centre features well-kept streets and squares, outstanding architectural monuments and traditional houses of the XVII and XVIII centuries. In La Laguna it is possible to

appreciate the beauty of traditional urban Canarian design - the bright arrayed facades with the heavy, double wooden doors and charming balconies with small shops scattered down the narrow streets.

After some free time for exploration on your own, shopping or just a relaxed break at one of the squares... the group meets for delicious food and drinks before we drive back to the hotel.

Subsidised by KES International, tickets for the trip will cost only 30 Euro per person (including drinks / food and a guided tour.)

Thursday 16 June
Conference Dinner

Dinner will take place at MESON EL MONASTERIO.

"El Monasterio" is a rustic style Restaurant full of character, a type of old Canarian estate, dating back to 1646. The venue offers fantastic views over the sea and to the rich green mountainside. Once inside the grounds it is like a small village with a variety of eating areas, magnificent gardens and animals, such as ponies, ducks, hens, roosters and even a very proud peacock, an old press, wine cellars, barrels, carriages and much more!

The conference gala dinner will take place on the evening of Thursday 16 June for those with Full Registration or who have purchased a ticket.

Keynote Talks

Jair M. Abe
University of Sao Paulo & Paulista University, Brazil

Paraconsistent Logic and its Implication to AI and Technology

Abstract: Non-classical logics have played an important role in AI and Technology. In this talk we present an overview of Paraconsistent Annotated Logic and some its important applications. Roughly such systems allow to deal with imprecise, inconsistent and incomplete systems of information. We show its usefulness in Biomedicine, Automation, Decision-making themes, among others.

Biography: Jair Minoro Abe received B.A. and MSc in Pure Mathematics - University of Sao Paulo, Brazil. Also received the Doctor degree and Livre-Docente title by the same University. He is currently coordinator of Logic Area of Institute of Advanced Studies - University of Sao Paulo - Brazil and Full Professor at Paulista University - Brazil. His research interest topics include Paracnsistent Annotated Logics and AI, ANN in Biomedicine and Automation, among others. He is Senior Member of IEEE.

Antonio Fernández-Caballero
Universidad de Castilla-La Mancha, Spain

Smart Health Environments and Ambient Intelligence at the Service of Emotion Detection and Regulation

Abstract: A health environment is, in general, any location where healthcare is provided. The term usually includes hospitals, clinics, outpatient care centres, and specialised care centres, such as birthing and psychiatric care centres. In this sense, the proper home of a person suffering from some kind of disease, be it physical or mental, can also be considered a health environment. In addition, a smart environment (SmE) is a place that has been enriched with technology (sensors, processors, actuators, and other devices interconnected through a network) to enhance the services provided to humans. A smart health environment (SmHE) can be seen as an extension of a traditional SmE oriented towards offering an enhanced level of health to the patients. Ambient Intelligence (AmI) enhances the global behaviour of such environments by providing high level functionality in terms of sensitivity, adaptability, and responsiveness to human needs, habits, gestures, and emotions.
This talk provides an overview of the speaker's experience on AmI-based emotion detection and regulation in SmHE. In first place, SmHE as envisioned by the speaker's research team should be able to continuously monitor a patient's emotional state by analysing his/her physiological signals, facial expression and overall activities. Then, the system provides the best-tailored actions in the environment to regulate these emotions towards a positive mood through music and colour/light. The talk describes the three main parts of such architecture based on Artificial Intelligence techniques, which are "emotion detection", "emotion regulation" and "emotion feedback control".

Biography: Antonio Fernández-Caballero received his MS degree in Computer Science from Universidad Politécnica de Madrid, Spain, in 1993, and his PhD from the Department of Artificial Intelligence of the Universidad Nacional de Educación a Distancia, Spain, in 2001. He is Full Professor at the Department of Computer Science at Universidad de Castilla-La Mancha. He is the director of the n&aIS (natural and artificial Interaction Systems) research group at the Albacete Research Institute of Informatics. His research interests are in Artificial Intelligence, Computer Vision, Sensor Fusion, Human-Computer Interaction, and Affective Computing. Antonio Fernández-Caballero is Associate Editor of Pattern Recognition Letters, Topic Editor-in-Chief of International Journal of Advanced Robotic Systems and Specialty-Chief-Editor of Frontiers in Robotics and AI. He has authored more than 300 peer-reviewed papers.

Mauro Gatti
IBM, Italy

The application of process mining and text mining to the study of the clinical pathway for stroke management

Abstract: Healthcare is important, expensive, complex and produce a huge amount of data. So it is not surprising in the new gold (data) mining era that large companies are investing resources and money to turn healthcare data into information nuggets. Emphasis is on textual and omic data but it is quite likely that it is only from the fusion of different data and methods that value can ultimately be delivered to healthcare stakeholders. IBM has a broad strategy that encompasses areas as different as electronic medical records analysis and histopathological image analysis. Through acquisitions, research and development IBM is developing a broad portfolio in areas as diverse as population health management and clinical decision support systems.
The focus of our team is on combining process and text mining with the ultimate objective of improving the effectiveness of health care. We see hospitals as dynamical systems whose space can be obtained through process mining and whose dynamics can be learned through the combination of data mining and other techniques. However, hospitals are first and foremost social systems. Data can be unreliable, analyses can be undesired, turning analyses into actions can be hindered. Factoring in social aspects from the very beginning is crucial for project success.
In the presentation we shall go through the story of one of the projects we are have been working in the latest year whose goal was to learn from data the clinical stroke process and to spot differences between the expected and real process.

Biography: Mauro Gatti is a member of the IBM Italy Research as a Service team and a certified architect with twenty years of experience in multiple different areas. His current focus is on healthcare notably on the application of analytics to improve healthcare process. He holds a PhD in theoretical physics.

Vladimir Uskov

Bradley University, USA

Smart Education: A Synergetic Approach by SDF Community

Abstract: Modern sophisticated smart devices, smart systems, and smart technologies create unique and unprecedented opportunities for academic and training organizations in terms of new approaches to education, learning and teaching strategies, services to on-campus and remote/online students, set-ups of modern classrooms and labs. Resaerch&Markets predicts that the global smart education market to grow at a CAGR of 15.45% during the period 2016-2020. Markets&Markets forecasts the global smart education & learning market to grow from $105.23 Billion in 2015 to $446.85 Billion in 2020, at a Compound Annual Growth Rate (CAGR) of 24.4%. Therefore, it is necessary to perform active research and obtain a clear understanding of what main features, components, technologies, software, hardware, pedagogy, faculty, etc. will be required by smart education in the near future. This presentation is focused on smart education, including 1) smart education features (adaptation, sensing (awareness), inferring (logical reasoning, analytics), self-learning, anticipation, and self-organization), 2) smart classrooms of the 1st and 2nd generations, 3) software systems for smart education (Web-lecturing systems, collaborative Web-based communications systems, smart learning analytics systems, etc.), 4) hardware systems for smart education (smart devices, panoramic video cameras, SMART boards, smart card readers, biometric-based access control devices, robotic controllers and actuators, etc.), 5) technologies to support smart education (Internet-of-Things, cloud computing, ambient intelligence, smart agents, Web-lecturing technology, augmented and virtual reality, physical and cyber worlds, wireless sensor networking, context awareness, etc.); 6) smart pedagogy (learning-by-doing, collaborative learning, e-books, learning analytics, adaptive teaching, flipped classrooms, etc.), 7) smart faculty (profile, requirements, "smart technology- faculty" relationship), and 8) cost estimates of smart classroom implementation in a traditional university. It is expected that the outcomes of this presentation will motivate educators-innovators and experts in smart systems, smart technology, smart agent, intelligent decision technologies, smart software and smart hardware areas to work together towards a transformation of traditional education into smart education, and traditional university into a smart university.

Biography: Dr. Vladimir Uskov is a professor of Computer Science and Information Systems and director of the InterLabs Research Institute on Advanced Technology Applications in Education at Bradley University (Peoria, IL, U.S.A.).

Dr. Uskov obtained his Ph.D. degree from Moscow Aviation Institute - Technical University in 1986. His areas of expertise include but are not limited to 1) Smart Education, Smart University, Smart Classroom (2008-present), 2) Web-Based Education, Online Education and e-Learning (1995 - present), 3) Applications of Information Technologies in Education (1985 - present), and 4) traditional and Agile Software Engineering and Project Management (1980 - present).

Dr. Uskov has more than 325 professional publications, including 3 textbooks, 5 chapter books, and 51 published articles in referred journals in 3 different languages. Dr. Uskov received numerous grants in his areas of expertise from the National Science Foundation (NSF), Microsoft Corp., and various governmental institutions (Russia, Japan, USA, Germany, Switzerland, France, Holland, Italy, Finland, etc.), including major NSF (U.S.A.) grants ## 0420506, 0196015, 9950029 and 0002219.

Dr. Uskov is a Senior Member of the IEEE (2004). Dr. Uskov was a chair of the annual international conferences on Web-Based Education (WBE-2002 - WBE-2013), and Computers and Advanced Technology in Education (CATE-2002 - CATE-2013), and Editor-in-Chief of the Advanced Technology for Learning (ATL) international journal (2004-2008). From 2014, Dr. Uskov is a chair of the annual international conference on Smart Education and e-Learning (SEEL).

Conference Schedule

Wednesday 15 June

	Room 1 GRAN TIEDE	Room 2 IRIATE	Room 3 CANADAS	Room 4 SALINAS	Room 5 ESPERANZAS	Room 6 MERCEDES	Room 7 TAJINASTE
8.00-9.15	Registration						
9.15-9.30	**Opening Ceremony Prof Robert J Howlett and Prof Lakhmi C. Jain**						
9.30-10.30	**Keynote Speaker 1 Vladimir Uskov Bradley University, USA** *Smart Education: A Synergetic Approach by SDF Community*						
10.30-11.00	Coffee						

	Room 1 GRAN TIEDE	Room 2 IRIATE	Room 3 CANADAS	Room 4 SALINAS	Room 5 ESPERANZAS	Room 6 MERCEDES	Room 7 TAJINASTE
11.00-13.00	SEEL-1 Smart Education Concepts Chairs: Dr. Vladimir Uskov and Dr. Jean-Pierre-Gerval	IDT-1 Specialized Decision Techniques for Data Mining, Transportation and Project Management (IS01) Chair: Prof. Ireneusz Czarnowski	IDT-2 Intelligent Decision Technologies for Water Resources Management (IS02) and Recent Advances in Fuzzy Systems (IS09) Chairs: Dr. Wojciech Froelich and Prof. Jose L. Salmeron	IIMSS-1 General Track 1 Chair: Giuseppe De Pietro	IIMSS-2 Intelligent Video Processing and Transmission Systems (IS01) Chairs: Prof. Margarita N. Favorskaya, Prof. Lakhmi C. Jain and Prof. Mikhail Sergeev	InMed-1 Innovative Technology in Mental Healthcare (IS01) Chair: Antonio Fernández-Caballero	AMSTA-1 Agent and Multi-Agent Systems Chair: Prof. Mario Kusek
13.00-14.00	Lunch						
14.00-15.00	**Keynote Speaker 2** **Jair M. Abe** **University of Sao Paulo & Paulista University, Brazil** *Paraconsistent Logic and its Implication to AI and Technology*						

	Room 1 GRAN TIEDE	Room 2 IRIATE	Room 3 CANADAS	Room 4 SALINAS	Room 5 ESPERANZAS	Room 6 MERCEDES	Room 7 TAJINASTE
15.00-15.30	Coffee						
15.30-17.30	SEEL-2 Software and Hardware Systems for Smart Education Chairs: Dr. Ulrich Schmitt and Ekaterina Prasolova-Førland	IDT-3 General track 1 and Specialized Decision Techniques for Data Mining, Transportation and Project Management (IS01) Chair: Prof. Ireneusz Czarnowski	IDT-4 General track 2 and New Advances of Soft Computing in Industrial and Management Engineering (IS07) Chair: Prof. Junzo Watada	IIMSS-3 General Track 2 and New Technologies and Virtual Reality in Health Systems (IS10) Chairs: Luigi Gallo and Antonio Giordano	IIMSS-4 Autonomous System (IS03) Chairs: Dr. Milan Simic and Prof. Reza Nakhaie Jazar	InMed-2 Smart Medical and Healthcare Systems 2016 Workshop Chair: Eider Sanchez	AMSTA-2 Business Informatics and Gaming through Agent-based Modelling (IS05) Chair: Prof Setsuya Kurahashi
	Social Trip - Guided tour of La Laguna city and Reception						

Conference Schedule

Thursday 16 June

	Room 1 GRAN TIEDE	Room 2 IRIATE	Room 3 CANADAS	Room 4 SALINAS	Room 5 ESPERANZAS	Room 6 MERCEDES	Room 7 TAJINASTE
8.00-9.00	Registration						
9.00-11.00	**IDT-5** Intelligent Data Analysis and Applications (IS04) Chair: Dr. Urszula Stańczyk	**IDT-6** Decision Making Theory for Economics (IS06) Chair: Prof. Eizo Kinoshita	**IIMSS-5** Innovative Information Services for Advanced Knowledge Activity - 1 (IS02) Chairs: Prof. Koichi Asakura and Prof. Toyohide Watanabe	**IIMSS-6** Interactive Cognitive Systems (IS08) Chairs: Dr. Ignazio Infantino and Dr. Massimo Esposito	**SEEL-3** Smart Education: Case Studies Chair: Dr. Blanka Klimova	**AMSTA-3** Anthropic-Oriented Computing, Learning Paradigms and Applications: Agent-based Approach (IS03) Chair: Prof Manuel Mazzara	**InMed-3** Advanced ICT for Medical and Healthcare (IS05) Chair: Satoshi Tanaka
11.00-11.30	Coffee						

	Room 1 GRAN TIEDE	Room 2 IRIATE	Room 3 CANADAS	Room 4 SALINAS	Room 5 ESPERANZAS	Room 6 MERCEDES	Room 7 TAJINASTE
11.30-12.30	**Keynote Speaker 3** **Antonio Fernández-Caballero Universidad de Castilla-La Mancha, Spain** *Smart Health Environments and Ambient Intelligence at the Service of Emotion Detection and Regulation*						
12.30-13.30	**Lunch**						
13.30-15.30	**IDT-7** Intelligent Data Analysis and Applications (IS04) Chair: Dr. Beata Zielosko	**IDT-8** General track 3 and Interdisciplinary Approaches in Business Intelligence Research and Practice (IS08) Chair: Prof. Ivan Luković	**IIMSS-7** Innovative Information Services for Advanced Knowledge Activity - 2 (IS02) Prof. Koichi Asakura and Prof. Toyohide Watanabe	**IIMSS-8** Intelligent Computer Systems Enhancing Creativity (IS06) Chairs: Raffaele De Amicis and David Oyarzun	**SEEL-4** Towards Smart e-Learning Chair: Dr. Adriana Schiopoiu Burlea	**AMSTA-4** Agent-based Modeling and Simulation Chair: Prof. Roman Sperka	**InMed-4** Biomedical Engineering, Trends, Research and Technologies (IS03) Chair: Dr. Rosario Baltazar Flores
15.30-	**Coffee**						

	Room 1 GRAN TIEDE	Room 2 IRIATE	Room 3 CANADAS	Room 4 SALINAS	Room 5 ESPERANZAS	Room 6 MERCEDES	Room 7 TAJINASTE
16.00							
16.00-18.00	**IDT-9** Intelligent Data Analysis and Applications (IS04) and Reasoning-based Intelligent Systems (IS12) Chairs: Prof. Kazumi Nakamatsu and Dr. Urszula Stańczyk	**IDT-10** Intelligent Decision Making for Uncertain Unstructured Big Data (IS05) and Pattern Recognition in Audio and Speech Processing (IS11) Chairs: Prof. Claudio Turchetti, Prof. Junzo Watada, Dr. Paolo Crippa	**IIMSS-9** Intelligent Computer Systems Enhancing Creativity (IS06) and Internet of Things: Architecture, Technologies and Applications (IS07) Chairs: Raffaele De Amicis and David Oyarzun (IS06) & Dr. Francesco Piccialli and Prof. Angelo Chianese (IS07)	**SEEL-5** Assessment and Evaluation in Smart Education Chairs Dr. François Kany	**SEEL-6** Smart Education/Training and Special Students/Learners Chairs: Dr. Jeffrey P. Bakken and Dr. Piet De Groen	**AMSTA-5** Business Process Management Chair: Prof. Jessica Chen-Burger	**InMed-5** Advances in Data & Knowledge Management for Healthcare (IS04) Chair: Massimo Esposito
	Conference Banquet at El Monasterio						

Conference Schedule

Friday 17 June

	Room 1 GRAN TIEDE	Room 2 IRIATE	Room 3 CANADAS	Room 4 SALINAS	Room 5 ESPERANZAS	Room 6 MERCEDES	Room 7 TAJINASTE
8.30-9.00	Registration						
9.00-11.00	IIMSS-10 Smart Environments and Information Systems (IS09) Chairs: Dr. Massimo Cossentino, Dr. Vincent Hilaire and Prof. Juan Pavon	SEEL-7 Smart Education: Research Projects Chairs: Dr. Natalya Serdyukova and Dr. Petra Poulova	SEEL-8 Innovative Teaching and Learning Strategies for Smart Education: Case Studies Chairs: Dr. Fredy Martinez and Dr. Nazar Zaki	IDT-11 Pattern Recognition for Decision Making Systems (IS10) Chairs: Dr. Paolo Crippa and Prof. Claudio Turchetti	IDT-12 Intelligent Methods for Eye Movement Data Processing and Analysis (IS03) Chair: Dr. Katarzyna Harezlak	InMed-6 Healthcare Support System Chair: Kyoko Hasegawa	
11.00-11.30	Coffee						

	Room 1 GRAN TIEDE	Room 2 IRIATE	Room 3 CANADAS	Room 4 SALINAS	Room 5 ESPERANZAS	Room 6 MERCEDES	Room 7 TAJINASTE
11.30-12.30	**Keynote Speaker 4** **Dr Mauro Gatti IBM** *The application of process mining and text mining to the study of the clinical pathway for stroke management*						
12.30-13.30	Lunch						
13.30-15.30	**IIMSS-11** Mobility Data Analysis and Mining (IS05) Chair: Prof. Jalel Akaichi	**SEEL-9** Smart Technology as a Resource to Improve Education Education and Professional Training (IS01) Session organizer: Dr. Natalya Gerova	**SEEL-10** Smart Education and Smart e-Learning: Online Presentations Chair: Dr. Vladimir Uskov	**IDT-13** General Track 4 Chair: Prof. Dariusz Barbucha	**IDT-14** General Track 5 Chair: Dr. Ewa Ratajczak-Ropel		
15.30-16.00	Coffee						
16.00	Closing Ceremony						

AMSTA Paper Presentations

AMSTA-1
Weds 15 June, 11.00-13.00

AMSTA-1: Agent and Multi-Agent Systems
Chair: Prof. Mario Kusek

ams16-003 Faceted Query Answering in a Multiagent System of Ontology-Enhanced Databases
Pankowski Tadeusz and Brzykcy Grazyna

ams16-011 SWARM: A Multi-Agent System for Layout Automation in Analog Integrated Circuit Design
Marolt Daniel, Scheible J urgen, Jerke G oran, and Marolt Vinko

ams16-018 Assignment Problem with Preference and an Efficient Solution Method without Dissatisfaction
Saito Kengo and Sugawara Toshiharu

ams16-029 Efficient Model Checking Timed and Weighted Interpreted Systems Using SMT and SAT Solvers
Zbrzezny Agnieszka M., Zbrzezny Andrzej, and Raimondi Franco

ams16-036 Building a Realistic Data Environment for Multiagent Mobility Simulation
Ksontini Feirouz, Zargayouna Mahdi, Scemama Gerard, and Leroy Bertrand

ams16-046 Agent-Based System for Reliable Machine-to-Machine Communication
Skocir Pavle, Kusek Mario, and Jezic Gordan

AMSTA-2
Weds 15 June, 15.30-17.30

AMSTA-2: Business Informatics and Gaming through Agent-based Modelling
Chair: Prof Setsuya Kurahashi

ams16-005 Model-Driven Development of Water Hammer Analysis Software for
Irrigation Pipeline System
Tanaka Yoshikazu and Tsuda Kazuhiko

ams16-045 A Health Policy Simulation Model of Ebola Haemorrhagic Fever and Zika
Fever
Kurahashi Setsuya

ams16-050 Analyzing the Influence of Indexing Strategies on Investors' Behavior and
Asset Pricing through Agent-Based Modeling: Smart Beta and Financial Markets
Takahashi Hiroshi

ams16-051 Text Analysis System for Measuring the Influence of News Articles
onIntraday Price Changes in Financial Markets
Goshima Keiichi and Takahashi Hiroshi

AMSTA-3
Thurs 16 June, 9.00-11.00

AMSTA-3: Anthropic-Oriented Computing, Learning Paradigms and Applications: Agent-based Approach
Chair: Prof Manuel Mazzara

ams16-016 Prediction of the Successful Completion of Requirements in Software Development ? An Initial Study
Pedrycz Witold, Iljazi Joana, Sillitti Alberto, and Succi Giancarlo

ams16-025 Evolution of Thinking Models in Automatic Incident Processing Systems
Toschev Alexander, Talanov Max, and Distefano Salvatore

ams16-032 Quality Attributes in Practice: Contemporary Data
Tumyrkin Rasul, Mazzara Manuel, Kassab Mohammad, Succi Giancarlo, and Lee JooYoung

ams16-039 Robot Dream
Tchitchigin Alexander, Talanov Max, Sana Larisa, and Mazzara Manuel

ams16-027 Intelligent Agents and Game-Based Learning Modules in a Learning Management System
Kuk Kristijan, Rancic Dejan, Pronic-Rancic Olivera, and Randelovic Dragan

ams16-038 Robot-Oriented Generative Learning Objects: An Agent-Based Vision
Stuikys Vytautas, Burbaite Renata, Drasute Vida, and Bespalova Kristina

AMSTA-4
Thurs 16 June, 13.30-15.30

AMSTA-4: Agent-based Modeling and Simulation
Chair: Prof Roman Sperka

ams16-004 Herding Algorithm in a Large Scale Multi-Agent simulation
Cimler Richard, Dolezal Ondrej, Kuhnova Jitka, and Pavlk Jakub

ams16-012 I-Fuzzy Core for Cooperative Games with Vague Coalitions
Mielcova Elena

ams16-013 Formalizing Data to Agent Model Mapping Using MOF: Application to a
Model of Residential Mobility in Marrakesh
Laatabi Ahmed, Marilleau Nicolas, Nguyen-Huu Tri, Hbid Hassan and Ait Babram
Mohamed

ams16-014 A Communication and Tracking Ontology for Mobile Systems in the Event
of a Large Scale Disaster
Hassan Mohd Khairul Azmi and Chen-Burger Yun-Heh

ams16-015 Towards an Interaction Protocols Adaptation and Management System
for Coordination in Crisis Business Processes
Chtourou Wassim and Bouzguenda Lot

ams16-024 Holonic Multi Agent System for Data Fusion in Vehicle Classification
Seric Ljiljana, Krstinic Damir, Braovic Maja, Milatic Ivan, Mircevski Aljosa, and
Stipanicev Darko

AMSTA-5
Thurs 16 June, 16.00-18.00

AMSTA-5: IS07: Business Process Management
Chair: Prof Jessica Chen-Burger

ams16-026 Modeling and Simulation of Coping Mechanisms and Emotional Behavior during Emergency Situations
Belhaj Mouna, Kebair Fahem, and Ben Said Lamjed

ams16-035 Dynamic System of Rating Alternatives by Agents with Interactions
Perzina Radomr and Ramk Jaroslav

ams16-048 Tra-c Speed Prediction Using Hidden Markov Models for Czech Republic Highways
Rapant Lukas, Slaninova Katerina, MatrinovicJan, and Martinovic Tomas

ams16-002 Business Process Modeling of Logistic Production Systems
Suchanek Petr and Bucki Robert

ams16-017 Application of a Business Economics Decision-making Function in an Agent Simulation Framework
Sperka Roman

ams16-047 Reduction of User Profiles for Behavioral Graphs
Slaninova Katerina, Martinovic Jan, and Golasowski Martin

IDT Paper Presentations

IDT-1
Weds 15 June, 11.00-13.00

IDT-1: Specialized Decision Techniques for Data Mining, Transportation and Project Management (IS01)
Chair: Prof. Ireneusz Czarnowski

idt16-063 Measuring Quality of Decision Rules through Ranking of Conditional Attributes
Urszula Stańczyk

idt16-077 Greedy Algorithm for Optimization of Association Rules Relative to Length
Beata Zielosko, Marek Robaszkiewicz

idt16-079 Decision Rules with Collinearity Models
Leon Bobrowski

idt16-102 Ant Clustering Algorithm with Information Theoretic Learning
Urszula Boryczka, Mariusz Boryczka

idt16-100 Apache Spark Implementation of the Distance-Based Kernel-based Fuzzy C-means Clustering Classifier
Joanna Jędrzejowicz, Piotr Jędrzejowicz, Izabela Wierzbowska

idt16-117 Kernel-Based Fuzzy C-Means Clustering Algorithm for RBF Network Initialization
Ireneusz Czarnowski, Piotr Jędrzejowicz

IDT-2
Weds 15 June, 11.00-13.00

IDT-2: Intelligent Decision Technologies for Water Resources Management (IS02) and Recent Advances in Fuzzy Systems (IS09)
Chairs: Dr. Wojciech Froelich, Prof. Jose L. Salmeron

idt16-011 Forecasting Domestic Water Consumption Using Bayesian Model
Wojciech Froelich, Ewa Magiera

idt16-103 An Evaluation of the Instruments Aimed at Poland's Water Savings
Krzysztof Berbeka, Malgorzata Palys

idt16-107 Soft Computing Approaches for Urban Water Demand Forecasting
Konstantinos Kokkinos, Elpiniki I. Papageorgiou, Katarzyna Poczeta

idt16-014 Modeling and Forecasting of Well-being Using Fuzzy Cognitive Maps
Tatiana Penkova, Wojciech Froelich

idt16-027 Embedded Dynamic Fuzzy Cognitive Maps for Controller in Industrial Mixer
Márcio Mendonça, Flávio Neves Jr, Lúcia V. R. de Arruda

idt16-124 Analyzing Cloud Business Services with Choquet Fuzzy Integrals and Support Vector Machines
Jose L. Salmeron, Pedro Palos

IDT-3
Weds 15 June, 15.30-17.30

IDT-3: General track 1 and Specialized Decision Techniques for Data Mining, Transportation and Project Management (IS01)
Chair: Prof. Ireneusz Czarnowski

idt16-121 An Improved Agent-Based Approach to the Dynamic Vehicle Routing Problem
Dariusz Barbucha

idt16-036 Scheduling System for Multiple Unmanned Aerial Vehicles in Indoor Environments Using the CSP Approach
Youngsoo Park, Yohanes Khosiawan, Ilkyeong Moon, Izabela Ewa Nielsen

idt16-033 Solving Technician and Task Scheduling Problems with an Intelligent Decision Heuristic
Amy Khalfay, Alan Crispin, Keeley Crockett

idt16-047 A Hybrid Approach to Decision Support for Resource-constrained Scheduling Problems
Paweł Sitek, Izabela Nielsen, Jarosław Wikarek, Peter Nielsen

idt16-022 An Approach for Designing Order Size Dependent Lead Time Models for Use in Inventory and Supply Chain Management
Peter Nielsen, Zbigniew Michna

idt16-083 PLA Based Strategy for Solving MRCPSP by a Team of Agents
Piotr Jędrzejowicz, Ewa Ratajczak-Ropel

IDT-4
Weds 15 June, 15.30-17.30

IDT-4: General track 2 and New Advances of Soft Computing in Industrial and Management Engineering (IS07)
Chair: Prof. Junzo Watada

idt16-104 A Double Layer Neural Network Based on Artificial Bee Colony Algorithm for Solving Quadratic Bi-Level Programming Problem
Junzo Watada, Haochen Ding

idt16-116 A Memetic Fuzzy ARTMAP by a Grammatical Evolution Approach
Shing Chiang Tan, Chee Peng Lim, Junzo Watada

idt16-118 Particle Swarm Optimization Based Support Vector Machine for Human Tracking
Zhenyuan Xu, Chao Xu, Junzo Watada

idt16-086 Intelligent Monitoring of Complex Discrete-Event Systems
Gianfranco Lamperti, Giulio Quarenghi

idt16-046 An Ontology Supporting Multiple-criteria Decision Analysis Method Selection
Jarosław Wątróbski

IDT-5
Thurs 16 June, 9.00-11.00

IDT-5: Intelligent Data Analysis and Applications (IS04)
Chair: Dr. Urszula Stańczyk

idt16-008 Comparison of Four Methods of Combining Classifiers on the Basis of Dispersed Medical Data
Małgorzata Przybyła-Kasperek

idt16-074 Epigenetically Inspired Modification of Genetic Algorithm and His Efficiency on Biological Sequence Alignment
Kornel Chromiński, Mariusz Boryczka

idt16-075 Meta-Bayes Classifier with Markov Model Applied to the Control of Bioprosthetic Hand
Marek Kurzynski, Marcin Majak

idt16-064 Using Dissimilarity Matrix for Eye Movement Biometrics with a Jumping Point Experiment
Pawel Kasprowski, Katarzyna Harezlak

idt16-057 Automatic Categorization of Email into Folders by Ant Colony Decision Tree and Social Networks Analysis
Urszula Boryczka, Barbara Probierz, Jan Kozak

idt16-040 Exploiting Emoticons to Generate Emotional Dictionaries From Facebook Pages
Hanen Ameur, Salma Jamoussi, Abdelmajid Ben Hamadou

IDT-6
Thurs 16 June, 9.00-11.00

IDT-6: Decision Making Theory for Economics (IS06)
Chair: Prof. Eizo Kinoshita

idt16-012 Ranking Alternatives by Pairwise Comparisons Matrix With Fuzzy Elements on Alo-Group
Jaroslav Ramík

idt16-030 An Analysis on Three Inflection Points on Four Economic Phases
Takafumi Mizuno, Eizo Kinoshita

idt16-052 Economic Rationalities and Governmental Actions on the Thetical Economics and the Antithetical Economics
Eizo Kinoshita, Takafumi Mizuno

idt16-060 Improvement of the Weights Due to Inconsistent Pairwise Comparisons in the AHP
Kazutomo Nishizawa

idt16-099 Super Pairwise Comparison Matrix in the dominant AHP
Takao Ohya, Eizo Kinoshita

idt16-029 Detecting Value-added Tax Evasion by Business Entities of Kazakhstan
Zhenisbek Assylbekov, Igor Melnykov, Rustam Bekishev

IDT-7
Thurs 16 June, 13.30-15.30

IDT-7: Intelligent Data Analysis and Applications (IS04)
Chair: Dr. Beata Zielosko

idt16-054 Feature Selection Methods based on Decision Rule and Tree Models
Wiesław Paja
idt16-088 Decision Trees on the Foreign Exchange Market
Przemysław Juszczuk, Jan Kozak, Katarzyna Trynda

idt16-041
Multiple Ontology-based Indexing of Multimedia Documents on the World Wide Web
Mohammed Maree, Mohammed Belkhatir, Fariza Fauzi

idt16-017 Estimation of Coefficient of Static Friction of Surface by Analyzing Photo
Images
Hitoshi Tamura, Yasushi Kambayashi

idt16-028 Decision Case Management for Digital Enterprise Architectures with the
Internet of Things
Alfred Zimmermann, Rainer Schmidt, Dierk Jugel

idt16-076 Contextual Modelling Collaborative Recommender System - Real
Environment Deployment Results
Urszula Kużelewska

IDT-8
Thrus 16 June, 13.30-15.30

IDT-8: General track 3 and Interdisciplinary Approaches in Business Intelligence Research and Practice (IS08)
Chair: Prof. Ivan Luković

idt16-048 Heterogeneous NoSQL Databases Abstraction Approach Based on Full Text Search Indexes
Hassen Fadoua, Grissa Touzi Amel

idt16-078 Potentials of Image Mining for Business Process Management
Rainer Schmidt, Michael Möhring, Alfred Zimmermann

idt16-097 Decision Trees as Readable Models for Early Childhood Caries
Vladimir Ivančević, Nemanja Igić, Branko Terzić

idt16-091 Probabilistic Ontology Definition Meta-Model. Extension of OWL2 Meta-Model for Defining Probabilistic Ontologies
Hlel Emna, Jamoussi Salma, Turki Mohamed

idt16-084 Toward a Conversation Partner Agent for People with Aphasia: Assisting Word Retrieval
Kazuhiro Kuwabara, Takayuki Iwamae, Yudai Wada

IDT-9
Thurs 16 June, 16.00-18.00

IDT-9: Intelligent Data Analysis and Applications (IS04) and Reasoning-based Intelligent Systems (IS12)

Chairs: Prof. Kazumi Nakamatsu, Dr. Urszula Stańczyk

idt16-089 On Granular Rough Computing: Covering by Joint and Disjoint Granules in Epsilon Concept Dependent Granulation
Piotr Artiemjew, Jacek Szypulski

idt16-090 On Approaches to Discretization of Datasets Used for Evaluation of Decision Systems
Grzegorz Baron, Katarzyna Harężlak

idt16-044 Visual Builder of Rules for Spacecraft Onboard Real-Time Knowledge Base
Andrey Tyugashev

idt16-067 A Generic Document Retrieval Framework Based On UMLS Similarity For Biomedical Question Answering System
Mourad Sarrouti, Said Ouatik El Alaoui

idt16-105 An IoA Cloud-based Farmer Support System "AgriMieru"
Alireza Ahrary, Masayoshi Inada, Yoshitaka Yamashita

idt16-109 Review Paper:Paraconsistent Process Order Control
Kazumi Nakamatsu, Jair Minoro Abe, Seiki Akama

IDT-10
Thurs 16 June, 16.00-18.00

IDT-10: Intelligent Decision Making for Uncertain Unstructured Big Data (IS05) and Pattern Recognition in Audio and Speech Processing (IS11)
Chairs: Prof. Claudio Turchetti, Prof. Junzo Watada, Dr. Paolo Crippa

idt16-081 A Framework for Extracting Reliable Information from Unstructured Uncertain Big Data
Sanjay Kumar Singh, Neel Mani, Bharat Singh

idt16-003 A Bayesian Approach to Classify the Music Scores on the basis of the Music Style
Michele Della Ventura

idt16-108 Music Genre Classification Using a Gradient-Based Local Texture Descriptor
Faisal Ahmed, Padma Polash Paul, Marina Gavrilova

idt16-111 Robust Speaker Identification in a Meeting with Short Audio Segments
Giorgio Biagetti, Paolo Crippa, Laura Falaschetti

IDT-11
Fri 17 June, 9.00-11.00

IDT-11: Pattern Recognition for Decision Making Systems (IS10)
Chairs: Dr Paolo Crippa and Prof. Claudio Turchetti

idt16-110 Personal Recommendation System for Improving Sleep Quality
Patrick Datko, Wilhelm Daniel Scherz, Oana Ramona Velicu

idt16-042 Automatic Human Activity Segmentation and Labeling in RGBD Videos
David Jardim, Luís Nunes, Miguel Sales Dias

idt16-106 Smart Under-Sampling for the Detection of Rare Patterns in Unbalanced
Datasets
Marco Vannucci, Valentina Colla

idt16-016 Predictive Strength of Bayesian Networks for Diagnosis of Depressive
Disorders
Blessing Ojeme, Audrey Mbogho

idt16-112 Multivariate Direction Scoring for Dimensionality Reduction in Classification
Problems
Giorgio Biagetti, Paolo Crippa, Laura Falaschetti

idt16-113 An Efficient Technique for Real-Time Human Activity Classification Using
Accelerometer Data
Giorgio Biagetti, Paolo Crippa, Laura Falaschetti

IDT-12
Fri 17 June, 9.00-11.00

IDT-12: Intelligent Methods for Eye Movement Data Processing and Analysis (IS03)
Chair: Dr. Katarzyna Harezlak

idt16-002 Time-Preserving Visual Attention Maps
Michael Burch

idt16-049 Eye Movements in Reading the Texts of Different Functional Styles:
Evidence from Russian
Tatiana Petrova

idt16-056 Monitoring Dementia with Automatic Eye Movements Analysis
Yanxia Zhang, Thomas Wilcockson, Kwang In Kim

idt16-071 Eye Movement Evidence of Cognitive Strategies in SL Vocabulary Learning
Irina Blinnikova, Anna Izmalkova

idt16-098 Application of Eye Tracking for Diagnosis and Therapy of Children with
Brain Disabilities
Katarzyna Harezlak, Pawel Kasprowski, Michalina Dzierzega

idt16-080 The Rank Reversals Paradox in Management Decisions: the Comparison of
the AHP and COMET Methods
Wojciech Sałabun, Paweł Ziemba, Jarosław Wątróbski

IDT-13
Fri 17 June, 13.30-15.30

IDT-13: General track 4
Chair: Prof. Dariusz Barbucha

idt16-018 Grouping Like-Minded Users for Ratings' Prediction
Soufiene Jaffali, Salma Jamoussi, Abdelmajid Ben Hamadou

idt16-072 Maximum Lifetime Problem in Sensor Networks with Limited Channel
Capacity
Zbigniew Lipiński

idt16-051 Prediction of Length of Hospital Stay in Preterm Infants A Case-Based
Reasoning View
Ana Coimbra, Henrique Vicente, António Abelha

idt16-087 Anticipation Based on a Bi-level Bi-objective Modeling for the Decision-
making in the Car-following Behavior
Anouer Bennajeh, Fahem Kebair, Lamjed Ben Said

idt16-062 The Shapley Value on a Class of Cooperative Games under Incomplete
Information
Satoshi Masuya

idt16-024 Clique Editing to Support Case vs Control Discrimination
Riccardo Dondi, Giancarlo Mauri, Italo Zoppis

IDT-14
Fri 17 June, 13.30-15.30

IDT-14: General track 5
Chair: Dr. Ewa Ratajczak-Ropel

idt16-096 Development Aid Decision Making Framework Based On Hybrid MCDM
Eric Afful-Dadzie, Zuzana Komínková Oplatková, Stephen Nabareseh

idt16-082 A New Approach to a Derivation of a Priority Vector from an Interval
Comparison Matrix in a Group AHP Framework
Jiri Mazurek

idt16-065 Modeling and Property Analysis of E-Commerce Logistics Supernetwork
Chuanmin Mi, Yinchuan Wang, Yetian Chen

idt16-073 Statistical Method for the Problem of Bronchopulmonary Dysplasia
Classifcation in Pre-mature Infants
Wieslaw Wajs, Hubert Wojtowicz, Piotr Wais

idt16-119 Properties of the Island-Based and Single Population Differential Evolution
Algorithms Applied to Discrete-Continuous Scheduling
Piotr Jędrzejowicz, Aleksander Skakovski

idt16-032 On Classification of Linguistic Data - Case Study: Post-operative
Kalle Saastamoinen

IIMSS Paper Presentations

IIMSS-1
Weds 15 June: 11.00-13.00

IIMSS-1: General track 1
Chair: Dr Giuseppe De Pietro

ims16-041 Analysis of similarity measurements in CBIR using clustered Tamura features for biomedical images
Nadia Brancati, Francesco Camastra

ims16-020 2-Stripes Block-Circulant LDPC Codes for Single Bursts Correction
Andrei Ovchinnikov, Evgenii Krouk

ims16-035 Data Dictionary Extraction for Robust Emergency Detection
Emanuele Cipolla, Filippo Vella

ims16-069 SmartCARE - An ICT platform in the domain of stroke pathology to manage rehabilitation treatment and telemonitoring at home
Giuseppe Caggianese, Francesco Adinolfi, Luigi Gallo, Juan Grosso, Francesco Infarinato, Nazzareno Marchese, Patrizio Sale, Emiliano Spaltro

ims16-031 Optimal Design of IPsec-based Mobile Virtual Private Networks for Secure Transfer of Multimedia Data
Alexander Uskov, Adam Byerly, Colleen Heinemann, Vladimir Serdyukov, Natalia Serdyukova

ims16-096 Malicious event detecting in twitter communities
Flora Amato, Giovanni Cozzolino, Antonino Mazzeo, Sara Romano

IIMSS-2
Weds 15 June: 11.00-13.00

IIMSS-2: Intelligent Video Processing and Transmission Systems
Chairs: Prof. Margarita N. Favorskaya, Prof. Lakhmi C. Jain and Prof. Mikhail Sergeev

ims16-001 Fast Salient Object Detection in Non-Stationary Video Sequences Based on Spatial Saliency Maps
Margarita Favorskaya, Vladimir Buryachenko

ims16-002 Global Motion Estimation Using Saliency Maps in Non-Stationary Videos with Static Scenes
Margarita Favorskaya, Vladimir Buryachenko, Anastasia Tomilina

ims16-010 SVM-Based Cancer Grading from Histopathological Images using Morphological and Topological Features of Glands and Nuclei
Catalin Stoean, Daniela Ciobanu, Corina Gruia, Cristian Mesina, Adrian Sandita, Ruxandra Stoean

ims16-027 On Preservation of Video Data When Transmitting in Systems That Use Open Networks
Anton Vostrikov, Mikhail Sergeev, Nikolaj Solovjov

ims16-029 An invariant subcode of linear code
Sergei Fedorenko, Eugenii Krouk

ims16-034 Development Prospects of the Visual Data Compression Technologies and Advantages of New Approaches
Anton Vostrikov, Mikhail Sergeev

IIMSS-3
Weds 15 June: 15.30-17.30

IIMSS-3: General track 2 + New Technologies and Virtual Reality in Health Systems
Chairs: Luigi Gallo and Antonio Giordano

ims16-074 Adopting Decision Tree Based Policy Enforcement Mechanism to Protect Reconfigurable Devices
Mario Barbareschi, Antonino Mazzeo, Salvatore Miranda

ims16-012 Arabic Named Entity Recognition: A Survey and Analysis
Amal Dandashi, Jihad Aljaam, Sebti Foufou

ims16-019 Exploitation of Web Resources Towards Increased Conversions and Effectiveness
Jarosław Jankowski, Wojciech Sałabun, Jarosław Wątróbski, Paweł Ziemba

ims16-043 How to Manage Keys and Reconfiguration in WSNs Exploiting SRAM Based PUFs
Mario Barbareschi, Domenico Amelino, Ermanno Battista, Antonino Mazzeo

ims16-061 The use of Eye Tracking (ET) in targeting sports: a review of the studies on Quiet Eye (QE)
Dario Fegatelli, Andrea Chirico, Francesco Giancamilli, Fabio Lucidi, Luca Mallia

ims16-095 The Elapsed time during a Virtual reality treatment for stressful procedures.
Andrea Chirico, Massimiliano D'Aiuto, Monica Pinto, Carla Milanese, Alessandro Napoli, Michelino De Laurentiis, Gennaro Ciliberto, Fabio Lucidi

IIMSS-4
Weds 15 June: 15.30-17.30

IIMSS-4: Autonomous System
Chairs: Dr. Milan Simic and Prof. Reza Nakhaie Jazar

ims16-044 Motion Prediction for Ship-Based Autonomous Air Vehicle Operations
Cees Bil, Ameer Khan, Kaye Marion, Milan Simic

ims16-060 The Effect of Receding Horizon Pure Pursuit Control on Passenger Comfort in Autonomous Vehicles
Mohamed Elbanhawi, Reza Jazar, Milan Simic

ims16-064 From Automotive to Autonomous: Time-Triggered Operating Systems
Maria Spichkova, Heinz Schmidt, Milan Simic

ims16-084 Active Suspension Investigation Using Physical Networks
Milan Simic

IIMSS-5
Thurs 16 June: 9.00-11.00

IIMSS-5: Innovative Information Services for Advanced Knowledge Activity - 1
Chairs: Prof. Koichi Asakura and Prof. Toyohide Watanabe

ims16-028 A Near-far Resistant Preambleless Blind Receiver with Eigenbeams
Applicable to Sensor Networks
Kuniaki Yano, Yukihiro Kamiya

ims16-038 A New Approach for Subsurface Wireless Sensor Networks
Hikaru Koike, Yukihiro Kamiya

ims16-058 Implementation of mobile sensing platform with a tree based sensor
network
Katsuhiro Naito, Daichi Takai, Shunsuke Tani

ims16-067 Prototype implementation of actuator sensor network for agricultural
usages
Takuya Wada, Katsuhiro Naito

ims16-085 Development of multi-hop field sensor networks with Arduino board
Tomoya Ogawa, Katsuhiro Naito

ims16-039 Communication simulator with network behavior logging function for
supporting network construction exercise for beginners
Yuichiro Tateiwa, Naohisa Takahashi

IIMSS-6
Thurs 16 June : 9.00-11.00

IIMSS-6: Interactive Cognitive Systems
Chairs: Dr. Ignazio Infantino and Dr. Massimo Esposito

ims16-083 A Forward-Selection Algorithm for SVM-Based Question Classification in Cognitive Systems
Marco Pota, Giuseppe De Pietro, Massimo Esposito

ims16-053 Supporting Autonomy in Agent Oriented Methodologies
Valeria Seidita, Massimo Cossentino

ims16-068 A Data-driven Approach to Dynamically Learn Focused Lexicons for Recognizing Emotions in Social Network Streams
Giovanni Pilato, Diego Frias

ims16-072 Disaster prevention virtual advisors through soft sensor paradigm
Agnese Augello, Umberto Maniscalco, Giovanni Pilato, Filippo Vella

ims16-077 A Personal Intelligent Coach for Smart Embodied Learning Environments
Agnese Augello, Giuseppe Città, Manuel Gentile, Ignazio Infantino, Giovanni Pilato, Filippo Vella

ims16-079 A model of Social Chatbot
Agnese Augello, Frank Dignum, Manuel Gentile, Lucas Weideveld

IIMSS-7
Thurs 16 June: 13.30-15.30

IIMSS-7: Innovative Information Services for Advanced Knowledge Activity - 2
Chairs: Prof. Koichi Asakura and Prof. Toyohide Watanabe

ims16-026 A New Method to Apply BRAKE to Sensor Networks Aiming At Power Saving
Minori Kinose, Yukihiro Kamiya

ims16-033 A tool for visualization of meteorological data studied for integration in a multi risk management system
Filippo Vella, Emanuele Cipolla, Riccardo Rizzo, Dario Stabile

ims16-037 An Algorithm for Calculating Simple Evacuation Routes in Evacuation Guidance Systems
Koichi Asakura, Toyohide Watanabe

ims16-040 SkyCube-tree based Group-by Query Processing in OLAP Skyline Cubes
Hideki Sato, Takayuki Usami

ims16-003 Trends of Teaching/learning Issues through Analysis of Conference Presentation Articles
Toyohide Watanabe

IIMSS-8
Thurs 16 June: 13.30-15.30

IIMSS-8: Intelligent Computer Systems Enhancing Creativity
Chairs: Raffaele De Amicis and David Oyarzun

ims16-076 Mapping and Pocketing techniques for Laser Marking of 2D Shapes on 3D Curved Surfaces
Federico Devigili, Raffaele De Amicis, Davide Lotto

ims16-075 3DHOG for Geometric Similarity Measurement and Retrieval on Digital Cultural Heritage Archives
Reimar Tausch, Dieter W. Fellner, Pedro Santos, Hendrik Schmedt, Martin Schröttner

ims16-009 Computer Aided Process As 3D Data Provider In Footwear Industry
Bita Ture Savadkoohi, Raffaele De Amicis

ims16-062 CoolTour: VR and AR authoring tool to create cultural experiences
Nagore Barrena, Sara Garcia, Andres Navarro, David Oyarzun

ims16-063 Emotional platform for marketing research
Andres Navarro, Catherine Delevoye, David Oyarzun

ims16-065 Gamification as a Key Enabling Technology for Image Sensing and Tagging
Bruno Simões, Raffaele De Amicis

IIMSS-9
Thurs 16 June: 16.00-18.00

IIMSS-9: Intelligent Computer Systems Enhancing Creativity + Internet of Things: Architecture, Technologies and Applications
Chairs: Raffaele De Amicis and David Oyarzun (IS06) & Dr. Francesco Piccialli and Prof. Angelo Chianese (IS07)

ims16-066 Bridging Heritage and Tourist UX - A Socially-driven Perspective
Paola La Scala, Raffaele De Amicis

ims16-070 A personalised recommender system for tourists on city trips: concepts and implementation
Petr Aksenov, Theo Arentze, Astrid Kemperman

ims16-086 Experience-driven Framework for Technologically-enhanced Environments: Key Challenges and Potential Solutions
Bruno Simoes, Raffaele De Amicis

ims16-046 Touchless Disambiguation Techniques for Wearable Augmented Reality Systems
Giuseppe Caggianese, Luigi Gallo, Pietro Neroni

ims16-023 System Architecture and Functions of Internet-Based Production of Tailor-Made Clothes
Petra Perner

ims16-032 Influence of some parameters on visiting style classification in a cultural heritage case study
Salvatore Cuomo, Pasquale De Michele, Ardelio Galletti, Giovanni Ponti

ims16-080 Opinions Analysis in social networks for cultural heritage applications
Antonino Mazzeo, Flora Amato, Sergio Di Martino, Vincenzo Moscato, Antonio Picariello, Sara Romano

IIMSS-10
Fri 17 June: 9.00-11.00

IIMSS-10: Smart Environments and Information Systems
Chairs: Dr. Massimo Cossentino, Dr. Vincent Hilaire and Prof. Juan Pavon

ims16-048 An experience of Engineering of MAS for Smart Environments: extension of ASPECS
Philippe Descamps, Vincent Hilaire, Olivier Lamotte, Sebastian Rodriguez

ims16-052 A Norm-based Approach for Personalising Smart Environments
Patrizia Ribino, Antonella Cavaleri, Massimo Cossentino, Carmelo Lodato

ims16-054 Adopting a Middleware for Self-Adaptation in the Development of a Smart Travel System
Luca Sabatucci, Antonella Cavaleri, Massimo Cossentino

ims16-055 Pentas: Using satellites for Smart Sensing
Lorena Otero-Cerdeira, Alma Gomez-Rodrıguez, Francisco J. Rodrıguez-Martınez, Juan Carlos Gonzalez-Moreno, Arno Formella

ims16-056 A Multiple Data Stream Management Framework for Ambient Assisted Living Emulation
Jorge Gomez-sanz, Pablo Campillo Sanchzez

ims16-071 Soft Sensor Network For Environmental Monitoring
Umberto Maniscalco, Giovanni Pilato, Filippo Vella

IIMSS-11
Fri 17 June: 13.30-15.30

IIMSS-11: Mobility Data Analysis and Mining
Chair: Prof. Jalel Akaichi

ims16-006 Automatic Generation of Trajectory Data Warehouse Schemas
Nouha Arfaoui, Jalel Akaichi

ims16-011 A Taxonomy of Support Vector Machine for Event Streams Classification
Bouali Hanen, Almashhour Yasser

ims16-013 Social Networks Security Policies
Zeineb Dhouioui, Jalel Akaichi, Abdullah Ali Alqahtani

ims16-015 Recommending Multidimensional Spatial OLAP Queries
Olfa Layouni, Fahad Alahmari, Akaichi Jalel

ims16-016 Modeling Moving Regions : Colorectal Cancer Case Study
Marwa Massaâbi and Jalel Akaichi.

ims16-017 A UML/MARTE extension for designing energy harvesting in Wireless
Sensor Networks
Raoudha Saida, Yessine Hadjkacem

ims16-021 A Survey on Web service mining using QoS and recommendation based on
multidimensional approach
Ilhem Feddaoui, Jalel Akaichi, Imran Hassan Bergi, Faîçal Felhi

InMed Paper Presentations

InMed-1
Weds 15 June: 11.00-13.00

InMed-1: Innovative Technology in Mental Healthcare
Chair: Antonio Fernández-Caballero (Universidad de Castilla-La Mancha, Spain)

imed16-011 Non-lineal EEG Modelling by using Quadratic Entropy for Arousal Level Classification
Arturo Martínez-Rodrigo,   Raúl Alcaraz, Beatriz García-Martínez, Roberto Zangróniz, Antonio Fernández-Caballero

imed16-013 Emotional Induction through Films: A Model for the Regulation of Emotions
Luz Fernández-Aguilar, José Miguel Latorre, Laura Ros, Juan Pedro Serrano, Jorge Ricarte, Arturo Martínez-Rodrigo, Roberto Zangróniz, José Manuel Pastor, María T. López, Antonio Fernández-Caballero

imed16-014 Application of the Lognormal Model to the Vocal Tract Movement to Detect Neurological Diseases in Voice
Cristina Carmona-Duarte, Réjean Plamondon, Pedro Gómez-Vilda, Miguel A. Ferrer, Jesús B. Alonso, Ana Rita M. Londral

imed16-016 Exploring and Comparing Machine Learning Approaches for Predicting Mood over Time
Ward van Breda, Johnno Pastor, Mark Hoogendoorn, Jeroen Ruwaard, Joost Asselbergs, Heleen Riper

imed16-034 Cross-Cultural Telepsychiatry: An Innovative Approach to Assess and Treat Ethnic Minorities with Limited Language Proficiency
Davor Mucic

InMed-2
Weds 15 June: 15.30-17.30

InMed-2: Smart Medical and Healthcare Systems 2016 Workshop
Chair: Eider Sanchez (Visual Interaction Communication Technologies, Spain)

imed16-005 GENESIS Cloud-based System for Next Generation Sequencing Analysis: A Proof of Concept
Maider Alberich, Arkaitz Artetxe, Eduardo Santamaría-Navarro, Alfons Nonell-Canals, Grégory Maclair

imed16-012 Review of Automatic Segmentation Methods of White Matter Lesions on MRI Data
Darya Chyzhyk, Manuel Graña, Gerhard Ritter

imed16-017 Hygehos Ontology for Electronic Health Records
Naiara Muro, Eider Sanchez, Manuel Graña, Eduardo Carrasco, Fran Manzano, Jose María Susperregi, Agustin Agirre, Jesús Gómez

imed16-018 Views on Electronic Health Record
Manuel Graña, Oier Echaniz

imed16-038 Laparoscopic Video and Ultrasounds Image Processing in Minimally Invasive Pancreatic Surgeries
P. Sánchez-González, I. Oropesa, B. Rodríguez-Vila, M. Viana, A. Fernández-Pena, T. Arroyo, J. A. Sánchez-Margallo, J. L. Moyano, F. M. Sánchez-Margallo, E. J. Gómez

InMed-3
Thurs 16 June: 9.00-11.00
InMed-3: Advanced ICT for Medical and Healthcare
Chair: Satoshi Tanaka (Ritsumeikan University, Japan)

imed16-019 A Novel Robust Zero-watermarking Algorithm for Encrypted Medical Images in the DWT-DFT Encrypted Domain
Jiangtao Dong, Jingbing Li

imed16-024 A Touchless Visualization System for Medical Volumes Based on Kinect Gesture Recognition
Ryoma Fujii, Tomoko, Tateyama, Titinunt Kitrungrotsakul, Satoshi Tanaka, Yen-Wei Chen

imed16-026 Super-Resolution Technology for X-ray Images and its Application for Rheumatoid Arthritis Medical Examinations
Tomio Goto, Takuma Mori, Hidetoshi Kariya, Masato Shimizu, Masaru Sakurai, Koji Funahashi

imed16-036 Bayesian Model for Liver Tumor Enhancement
Yu Konno, Xian-Hua Han, Lanfen Lin, Hongjie Hu, Yitao Liu, Wenchao Zhu, Yen-Wei Chen

imed16-020 Fused Visualization with Non-Uniform Transparent Surface for Volumetric Data using Stochastic Point-based Rendering
Kyoko Hasegawa, Yuta Fujimoto, Rui Xu, Tomoko Tateyama, Yen-Wei Chen, Satoshi Tanaka

InMed-4:
Thurs 16 June: 13.30-15.30
InMed-4: Biomedical Engineering, Trends, Research and Technologies
Chair: Dra. Rosario Baltazar Flores (Leon Institute of Technology, León México)
Note: 15min/(talk+QA)

imed16-004 A Comparison of Performance of Sleep Spindle Classification Methods using Wavelets
Elena Hernandez-Pereira, Isaac Fernandez-Varela, Vicente Moret-Bonillo

imed16-007 Evaluation of Head-Mounted Displays for Macular Degeneration: A Pilot Study
Howard Moshtael, Lanxing Fu, Ian Underwood, Baljean Dhillon

imed16-010 Method of Infrared Thermography for Earlier Diagnostics of Gastric Colorectal and Cervical Cancer
B. Dekel, A. Zilberman, N. Blaunstein, Y. Cohen, M. B. Sergeev, L. L. Varlamova, G. S. Polishchuk

imed16-028 Tijuana's Sustainability for Healthcare Measurement using Fuzzy Systems
Bogart Yail Márquez, Arnulfo Alamis, Jose Sergio Magdaleno-Palencia, Karina Romo, Felma González, Sergio Mendez-Mota

imed16-029 Intelligent System for Learning of Comfort Preferences to Help People with Mobility Limitations
Sandra López, Rosario Baltazar, Lenin Lemus Zuñiga, Miguel Ángel Casillas, Arnulfo Alanis, Miguel A Mateo Pla, Víctor Zamudio, Guillermo Méndez

imed16-031 Design of a Middleware and Optimization Algorithms for Light Comfort in an Intelligent Environment
Teresa Barrón Llamas, Rosario Baltazar, Miguel A Casillas, Lenin Lemus, Arnulfo Alanis, Víctor Zamudio

imed16-032
Autism Disorder Neurological Treatment Support through the Use of Information Technology
Esperanza Manrique Rojas, Margarita Ramírez Ramirez, Hilda Beatriz Ramírez Moreno, Maricela Sevilla Caro, Arnulfo Alanís Garza,   José Sergio Magdaleno Palencia

imed16-033

Information Technologies in the Area of Health and Use of Mobile Technologies in the Area of Health in Tijuana, Baja California

Margarita Ramírez Ramírez, Esperanza Manrique Rojas, Nora del Carmen Osuna Millán, María del Consuelo Salgado Soto, José Sergio Magdaleno Palencia, Bogart Yail Márquez Lobato

InMed-5
Thurs 16 June : 16.00-18.00

InMed-5: Advances in Data & Knowledge Management for Healthcare
Chair: Massimo Esposito (ICAR-CNR, Italy)

inmed16-003 Automatic Quantification of the Extracellular Matrix Degradation
Produced by Tumor Cells
Nadia Brancati, Giuseppe De Pietro, Maria Frucci, Chiara Amoruso, Daniela Corda,
Alessia Varone

imed16-021 Quantitative EEG and Virtual Reality to Support Post-Stroke
Rehabilitation at Home
Alfonso Mastropietro, Sara Arlati, Simona Mrakic-Sposta, Luca Fontana, Cristina
Franchin, Matteo Malosio, Simone Pittaccio, Cristina Gramigna, Franco Moltni, Marco
Sacco, Giovanna Rizzo

imed16-022 Towards a Sustainable Solution for Collaborative Healthcare Research
Nikos Karacapilidis, George Potamias

imed16-025 An Ontology-based Approach for Representing Medical
Recommendations in mHealth Applications
Aniello Minutolo, Massimo Esposito, Giuseppe De Pietro

imed16-035 Semantic Cluster Labeling for Medical Relations
Anita Alicante, Anna Corazza, Francesco Isgrò, Stefano Silvestri

InMed-6
Fri 17 June: 9.00-11.00
InMed-6: Healthcare Support System
Chair: Kyoko Hasegawa (Ritsumeikan University, Japan)

imed16-002 Automated Diagnosis of Parkinsonian Syndromes by Deep Sparse
Filtering-based Features
Andrés Ortiz, Francisco J. Martínez-Murcia, María J. García-Tarifa, Francisco Lozano,
Juan M. Górriz, Javier Ramírez

imed16-006 Post-Stroke Hand Rehabilitation using a Wearable Robotic Glove
Dorin Popescu, Mircea Ivanescu, Razvan Popescu, Anca Petrisor, Livia-Carmen
Popescu, Ana-Maria Bumbea

imed16-008 An mHealth Application for a Personalized Monitoring of One's Own
Wellness: Design and Development
Manolo Forastiere, Giuseppe De Pietro, Giovanna Sannino

imed16-015 "White Coat" Effect Study as a Subclinical Target Organ Damage by
Means of a Web Platform
J. Novo, A. Hermida, M. Ortega, N. Barreira, M. G. Penedo, J. E. López, C. Calvo

SEEL Paper Presentations

SEEL-1
Weds 15 June: 11.00-13.00

SEEL-1: Smart Education Concepts
Co-Chairs: Dr. Vladimir Uskov and Dr. Jean-Pierre-Gerval

Welcome to SEEL-2016 Conference Address
Vladimir L. Uskov

seel16-085 Smart University Taxonomy: Features, Components, Systems
Vladimir L. Uskov, Jeffrey P. Bakken, Akshay Pandey, Mounica Yalamanchii, Urvashi
Singh, Archana Penumatsa

seel16-039 Innovative Approaches Toward Smart Education at National Institute of
Technology Gifu College
Nobuyuki Ogawa, Akira Shimizu

seel16-32 Smart Classroom
Jean-Pierre Gerval, Yann Le Ru

seel16-001 Teacher's Role in a Smart Learning Environment – A Review Study
Blanka Klimova

seel16-070 Toward Smart Value Co-Education
Vincenzo Loia, Gennaro Maione, Aurelio Tommasetti, Carlo Torre, Orlando Troisi,
Massimiliano Vesci

SEEL-2
Weds 15 June: 15.30-17.30

SEEL-2: Software and Hardware Systems for Smart Education
Chairs: Dr. Ulrich Schmitt and Dr. Ekaterina Prasolova-Førland

seel16-063 Application of Semantic Web Technologies to Facilitate Use of e-Learning System on Mobile Devices
Boban Vesin, Aleksandra Klasnja-Milicevic, Mirjana Ivanovic

seel16-014 Learning Object Assembly Based on Learning Styles
Aldo Ramirez-Arellano, Juan Bory-Reyes, Luis Manuel Hernández-Simón

seel16-080 Creating a Smart Virtual Reality Simulator for Sports Training and Education
Emil Moltu Staurset, Ekaterina Prasolova-Førland

seel16-073 Using Embedded Robotic Platform and Problem-Based Learning for Engineering Education
Fredy Martinez, Holman Montiel, Henry Valderrama

seel16-029 Redefining Knowledge Management Education with the Support of Personal Knowledge Management Devices
Ulrich Schmitt

seel16-077 Interactive Educational System Based on Generative Approach, and the Problem of Answer Checking
Vladimir G. Danilov, Ilya S. Turuntaev

SEEL-3
Thurs 16 June: 9.00-11.00

SEEL-3: Smart Education: Case Studies
Chair: Dr. Blanka Klimova

seel16-065 Data Mining of Students' Behaviors in Programming Exercises
Toshiyasu Kato, Yasushi Kambayashi, Yasushi Kodama

seel16-047 Social Network Sites as a Good Support for Study Purposes
Blanka Klimova, Petra Poulova, Lucie Ptackova

seel16-036 Design and Application of MOOC «Methods and Algorithms of Graph Theory» on National Platform of Open Education of the Russian Federation
Loubov S. Lisitsyna, Evgeniy A. Efimchik

seel16-064 A Framework for Human Learning Ability Study using Simultaneous EEG/fNIRS and Portable EEG for Learning and Teaching Development
Boonserm Kaewkamnerdpong

seel16-082 A Supporting Service in Teacher Training: Virtual Newspaper
Nuray Zan, Burcu Umut Zan

seel16-028 Smart Technologies in Psycho-Oriented Strategies of Adaptive Education
Alexander Gein, Dmitriy Istomin, Andrey Sheka

SEEL-4
Thurs 16 June: 13.30-15.30

SEEL-4: Towards Smart e-Learning
Chair: Dr. Adriana Schiopoiu Burlea

seel16-012 The Gamification Model for e-Learning Participants Engagement
Danguole Rutkauskiene, Daina Gudoniene, Rytis Maskeliunas, Tomas Blazauskas

seel16-023 Using e-Learning in Teaching Economics at Universities of the Czech Republic
Roman Svoboda, Martina Jarkovská, Karel Šrédl, Lucie Severová, Lenka Kopecká

seel16-007 An Integrative Approach of e-Learning: From Consumer to Prosumer
Adriana Schiopoiu Burlea, Dumitru Dan Burdescu

seel16-031 RLCP-Compatible Virtual Laboratories in Computer Science
Evgeniy A. Efimchik, Elena N. Cherepovskaya, Andrey V. Lyamin

seel16-067 Vagrant Virtual Machines for Hands-On Exercises in Massive Open Online Courses
Thomas Staubitz, Maximilian Brehm, Johannes Jasper, Thomas Werkmeister, Ralf Teusner, Christian Willems, Jan Renz, Christoph Meinel

seel16-068 On the Process of Mobile-Assisted Teaching and Learning at FIM UHK – Analysis and Reflection
Ivana Simonova, Petra Poulová

SEEL-5
Thurs 16 June: 16.00-18.00

SEEL-5: Assessment and Evaluation in Smart Education
Chair: Dr.François Kany

seel16-037 Students´ Assessment Preferences in ESP in the Smart Learning
Environment
Ivana Simonova

seel16-045 Assessment of Outcomes in Collaborative Project-Based Learning in
Online Courses
Dmitrii A. Ivaniushi, Andrey V. Lyamin, Dmitrii S. Kopylov

seel16-006 Exploiting the Characteristics of Lecturers Based on Faculty Performance
Evaluation Forms
Thuc-Doan Do, Thuy-Van T. Duong, Ngoc-Phien Nguyen

seel16-005 On-line formative assessment: Teaching Python in French CPGE
François Kany

seel16-034 Conceptual Framework for Feedback Automation in SLEs
Estefania Serral and Monique Snoeck

seel16-019 Assessment of Levels of Formation of Competence of Students as Users of
Information and Communication Technology in the Field of Health Care
Iskandar Mukhametzyanov, Alla Dimova

seel16-061 Economic Aspects of the Introduction of the SMART Technology into
Kindergartens and Primary schools – Czech National and Local Scene
Libuse Svobodova, Miloslava Cerna

SEEL-6
Thurs 16 June: 16.00-18.00

SEEL-6: Smart Education/Training and Special Students/Learners
Co-Chairs: Dr. Jeffrey P. Bakken and Dr. Piet De Groen

seel16-076 Smart Universities, Smart Classrooms and Students with Disabilities
Jeffrey P. Bakken, Vladimir L. Uskov, Aishwarya Doddapaneni, Archana Penumatsa

seel16-046 Transmedia Storytelling for Social Integration of Children with Cognitive Disabilities
Miguel Gea, Xavier Alaman, Pilar Rodriguez

seel16-021 Development of Smart-system of Distance Learning of Visually Impaired People on the Basis of the Combined of OWL Model
Galina Samigulina, Assem Shayakhmetova

seel16-083 Developing Computational Thinking Abilities Instead of Digital Literacy in Primary and Secondary School Students
Eduardo Segredo, Gara Miranda, Coromoto Leon, Anthea Santos

seel16-057 Tangible Interfaces for Cognitive Assessment and Training in Children: LogicART
Fabrizio Ferrara, Michela Ponticorvo, Andrea Di Ferdinando, Orazio Miglino

seel16-002 Elderly People and Their Use of Smart Technologies: Benefits and Limitations
Blanka Klimova

seel16-052 Combining Science with Art to Educate and Motivate Patients Prior to Colorectal Cancer Screening
Piet C. de Groen, Shreepali Patel, Mariana Lopez, Michael Szewczynski, Rob Toulson

SEEL-7
Fri 17 June: 9.00-11.00

SEEL-7: Smart Education: Research Projects
Co-Chairs: Dr. Natalya Serdyukova and Dr. Petra Poulova

seel16-022 Smart University Management Based on Process Approach and IT-Standards
Boris Pozdneev, Filip Busina, Alexander Ivannikov

seel16-062 A Formal Algebraic Approach to Modeling Smart University as an Efficient and Innovative System
Natalia A. Serdyukova, Vladimir I. Serdyukov, Vladimir L. Uskov, Vladimir V. Ilyin, Vladimir A. Slepov

seel16-042 Sequencing Educational Contents Using Clustering and Ant Colony Algorithms
María José Franco Lugo, Christian von Lücken, Esteban Ramírez Espinoza

seel16-050 Innovations in Subjects Knowledge Technologies
Petra Poulova, Ivana Simonova

seel16-035 Participation in State R&D Projects Jointly with Industrial Enterprises: Factor in Employability Improving of University Graduates
Alexey Margun, Artem Kremlev, Aleksandr Shchukin, Konstantin Zimenko, Dmitry Bazylev

seel16-066 University Smart Guidance Counselling
Elena Belskaya, Evgeniia Moldovanova, Svetlana Rozhkova, Olga Tsvetkova, Mariya Chervach

SEEL-8
Fri 17 June: 9.00-11.00

SEEL-8: Innovative Teaching and Learning Strategies for Smart Education: Case Studies
Co-Chairs: Dr. Fredy Martinez and Dr. Nazar Zaki

seel16-013 Inductive Teaching and Problem-Based Learning as Significant Training Tools in Electrical Engineering
Fredy Martinez, Holman Montiel, Edwar Jacinto

seel16-011 A Conceptual Framework For Knowledge Creation Based on Constructed Meanings within Mentor-Learner Conversations
Farshad Badie

seel16-043 Applications of Innovative "Active Learning" Strategy in "Control Systems" Curriculum
Dmitry Bazylev, Alexander Shchukin, Alexey Margun, Konstantin Zimenko, Artem Kremlev, Anton Titov

seel16-015 PageRank Algorithm to Improve the Peer-Led Team Learning Pedagogical Approach
Nazar Zaki

seel16-027 Introducing Smart Technologies for Teaching and Learning of Fundamental Disciplines
Svetlana V. Rozhkova, Valentina I. Rozhkova, Maria Y. Chervach

seel16-072 Learning Strategies for Cryptography Using Embedded Systems
Edwar Jacinto, Fredy Martinez, Fernando Martinez

SEEL-9
Fri 17 June: 13.30-15.30

SEEL-9: Special Session IS-01: Smart Technology as a Resource to Improve Education and Professional Training
Session organizer: Dr. Natalya Gerova

seel16-030 Smart Technologies in Foreign Language Students' Autonomous Learning
Natalya Gerova, Marina Lapenok, Irina Sheina

seel16-017 Information Education in Russia
Sergey A. Beshenkov, Etery V. Mindzaeva, Elena V. Beshenkova, Margarita I. Shutikova, Irina I. Trubina

seel16-016 Formation of the Individual Learning Path in the Information and Educational School Environment
Marina V. Lapenok, Olga M. Patrusheva, Natalya G. Tagiltseva, Lada V. Matveyeva, Natalya V. Gerova, Valentina V. Makeeva

seel16-018 Implementation of the Internet for Educational Purposes
Irena Robert, Lora Martirosyan, Natalya Gerova, Vasilina Kastornova, Iskandar Mukhametzyanov, Alla Dimova

seel16-044 Intelligent System of Training and Control of Knowledge, Based on Adaptive Semantic Models
Tamara Shikhnabieva, Sergey Beshenkov

seel16-054 Use of Electronic Mind Maps for Creation of Flexible Educational Information Environments
Marina Mamontova, Boris Starichenko, Sergey Novoselov,Margarita Kusova

seel16-069 Teaching Big Data Technology Practices in Cloud Environment
Alexander Shmid, Boris Pozin, Mikhail Ageykin

SEEL-10
Fri 17 June: 13.30-15.30

SEEL-10: Smart Education and Smart e-Learning: Online Presentations
Chair: Dr. Vladimir Uskov

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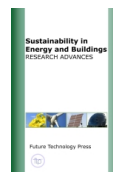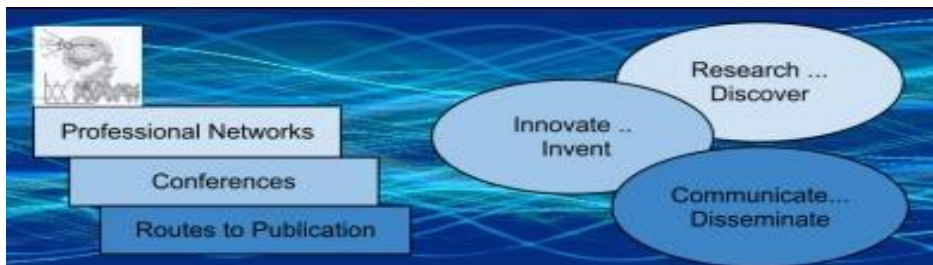
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