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About the Conference

Science and Information (SAI) Conference is a premier venue for researchers and industry practitioners to share their new ideas, original research results and practical development experiences from Computer Science, Electronics and Communication related areas.

SAI conference 2013 is held over three days, with paper presentations from the international community of authors, including presentations from keynote speakers and state-of-the-art lectures and tutorials. This conference is held in London, a vibrant and historical city which is home to multiple academic institutions and where visitors can enjoy a variety of activities and entertainment from the London Eye to Oxford Street to the ever green London Bridge!

The conference is Technically Co-Sponsored by

- IEEE Computer Society, UKRI Section
- IEEE Computational Intelligence Society, UKRI Section
- IEEE Consumer Electronics Society, UKRI Section
- IEEE Montreal Section

Venue:

Thistle Hotel London Heathrow Bath Road Longford, Heathrow Middlesex UB7 0EQ Tel: + 44 (0)208 624 4008 www.thistle.com/heathrow

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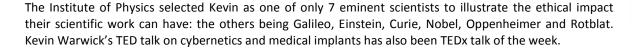
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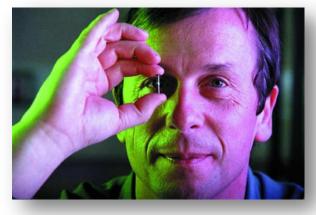
Keynote Speaker

Professor Kevin Warwick - The Disappearing Human-Machine Divide

October 7, 2013 | 9:00 AM to 10:30 AM

Kevin Warwick is Professor of Cybernetics at the University of Reading, England, where he carries out research into artificial intelligence, control and robotics. He was born in Coventry and took his first degree at Aston University, followed by a PhD and research post at Imperial College London. He subsequently held positions at Oxford, Newcastle and Warwick Universities before being offered the Chair at Reading. As well as publishing over 500 research papers Kevin has been awarded higher doctorates (DSc) both by Imperial College and the Czech Academy of Sciences, Prague and has received Honorary Doctorates from 6 Universities. He has appeared in the Guiness Book of Records for his research on several occasions and is perhaps best known for his implant self-experimentation, linking his own nervous system with a computer network.





Abstract: In this presentation Kevin will look at 1. The latest results with implant technology linking human brains with computers, 2. Culturing biological neurons and putting them in a robot body (robots with biological brains) and 3. Practical Turing Test results (can you tell the difference between a human and a machine from interactive communication?). New experimental data will be presented in each of these areas and participants will be able to see for themselves if they can tell the difference, in a Turing sense, between human and machine dialogue. A brief look will be taken at the future and what all this might mean.

Invited Talks

Tony Shan - Big Data in Practice

October 7, 2013 | 11:00 am - 12:00 pm

Tony Shan is an industry-recognized thought leader and technology visionary with 25 years of experience and guru-level expertise on systems design, architecture engineering, portfolio rationalization, product development, process standardization, SOA, and Cloud Computing. In a role of a hands-on practitioner and strategy expert, he has directed the lifecycle design of large-scale award-winning distributed systems on diverse platforms in Fortune 50 companies like IBM, Bank of America, Wells Fargo, Wachovia, and First Union. He has built more than 100 architecture/process frameworks, metamodels and methods, resulting from hundreds of real-world customer initiatives and applied research projects, mentoring/coaching engagements as adjunct professor, as well as strategic advising to Wall Street institutions. He is a prolific author with dozens of top-notch publications and over 10 books on next-generation technologies. He is a frequent keynote speaker and Chair/Panel/Advisor/Organizing Committee in preeminent conferences/workshops, an editor/editorial advisory board member of IT research journals/books, and a founder of several user groups and forums.

Abstract: This talk presents a methodical approach of effectively transforming a complex heterogeneous IT environment to a big data-enabled ecosystem. Despite enormous interests and attempts of jumping on big data predictive analytics, a lot of activities turned out to be ad hoc and experimental without long-term thinking and systematic planning. A comprehensive framework is designed to formulate a maturity-driven and process-based method, comprising 9 integral modules - Quantitativeness, Unification, Ingestion, Correlation, Kind, Tooling, Roadmap, Architecture, Convergence, and Knowledgebase (QUICK TRACK). This overarching framework with case studies helps guide the incremental adoption and iterative implementation of big data technologies in a holistic manner. We will walk through a few real-world implementation examples and use cases to illustrate the practical use of this adaptive framework in the real-life projects, such as big data design patterns and reference architecture.



Cyriel Kortleven - Break, Burn or Ban the Box

October 8, 2013 | 9:00 am -10:00 am

Cyriel Kortleven is a creative centipede who wants to get people moving by making them more aware of the chances in their lives. Cyriel is a much sought-after speaker at conferences, events and internal meetings. Through his playful and enthusiastic attitude to life, he creates an open and informal atmosphere - ideal for bigger events and conferences. His main subject is creativity and innovation. In a very practical and simple way, he enables the participants to experience the power of creative thinking and doing. His presentations are highly interactive (even when working with big groups) and are always tailored to his audience by using innovative examples from their field. Cyriel is already working more than 12 years in the domain of creativity and innovation. Apart from Belgium and the Netherlands, Cyriel has given various presentations in the bigger cities all over the world (in 2012, Cyriel has worked 111 days abroad in 13 different countries (in Europe, Asia, US and Australia). So as you can see ... interactive, inspiring, passionate, creative, international, this is Cyriel Kortleven. Expressive through and through.

Abstract: A presentation about business creativity and the importance of breaking fixed thinking patterns. During this interactive and energetic lecture, the audience will experience the power of creativity and get practical tools to apply it in their daily lives (with a lot of stories, examples, movies and exercises). You will discover what's inside the box (the Curse of Knowledge), learn six creative skills to survive the idea killers and give you a creative boost. Special edition for several industries: automotive, finance, government, high-tech, health care, events, marketing.



Professor Frank Zhigang Wang - Towards 2020 Computing

October 8, 2013 | 10:00 am - 10:45 am

Frank Z. Wang is the Professor in Future Computing and Head of School of Computing, University of Kent, UK. The School of Computing was formally opened by Her Majesty the Queen. Professor Wang's research interests include cloud/grid computing, green computing, brain computing and future computing. He has been invited to deliver keynote speeches and invited talks to report his research worldwide, for example at Princeton University, Carnegie Mellon University, CERN, Hong Kong University of Sci. & Tech., Tsinghua University (Taiwan), Jawaharlal Nehru University, Aristotle University, and University of Johannesburg. In 2004, he was appointed as Chair & Professor, Director of Centre for Grid Computing at CCHPCF (Cambridge-Cranfield High Performance Computing Facility). CCHPCF is a collaborative research facility in the Universities of Cambridge and Cranfield (with an investment size of £40 million). Prof Wang and his team have won an ACM/IEEE Super Computing finalist award. Prof Wang was elected as the Chairman (UK & Republic of Ireland Chapter) of the IEEE Computer Society in 2005. He is Fellow of British Computer Society. He has served the Irish Government High End Computing Panel for Science Foundation Ireland (SFI) and the UK Government EPSRC e-Science Panel.



Abstract: Towards 2020 Computing targets the next generation computing paradigms and their applications. We have been working on Cloud Computing, Grid Computing & Internet II for many years. A developed Cloud/Grid Computing platform conforms to the Internet standard and can universally accelerate Office/Database/Web/Media applications by a factor up to ten. This work won an ACM/IEEE Super Computing finalist award. We will also report our research on Green Computing, Brain Computing and Future Computing.

Professor Yaroslav D. Sergeyev - Infinity Computer

October 9, 2013 | 9:00 am - 9:45 am

Yaroslav D. Sergeyev is Distinguished Professor at the University of Calabria, Italy (professorship awarded by the Italian Government). He is also Professor (part-time contract) at N.I. Lobachevski Nizhni Novgorod State University, Russia and Affiliated Researcher at the Institute of High Performance Computing and Networking of the Italian National Research Council. He has got his Ph.D. from N.I. Lobachevski Nizhni Novgorod State University and his D.Sc. degree from M.V. Lomonosov State University, Moscow (this degree is Habilitation for Full Professorship in Russian universities). His research interests include numerical analysis, global optimization, infinity computing and calculus, set theory, number theory, fractals, parallel computing, and interval analysis. Prof. Sergeyev has been awarded several national and international prizes (Pythagoras International Prize in Mathematics, Italy, 2010 etc.). His list of publications contains 200 items. He is a member of editorial boards of 4 international journals and co-editor of 3 special issues. He has given more than 30 plenary and keynote lectures at prestigious international congresses and was a member of Scientific Committees of more than 40 international congresses. He is Coordinator of numerous national and international research and educational projects. Software developed under his supervision is used in more than 40 countries of the world.

Abstract: A new methodology allowing one to execute numerical computations with finite, infinite, and infinitesimal numbers on a new type of a computer – the Infinity Computer – is introduced. A calculator using the Infinity Computer technology is presented during the talk. The new approach is based on the principle 'The part is less than the whole' introduced by Ancient Greeks that is applied to all numbers (finite, infinite, and infinitesimal) and to all sets and processes (finite and infinite). It is shown that it becomes possible to write down finite, infinite, and infinitesimal numbers by a finite



number of symbols as particular cases of a unique framework (different from that of the non-standard Analysis). The point of view on infinite and infinitesimal quantities presented in this lecture uses strongly two methodological ideas borrowed from the modern Physics: relativity and interrelations holding between the object of an observation and the tool used for this observation. The latter is directly related to connections between different numeral systems used to describe mathematical objects and the objects themselves. The new computational methodology gives the possibility both to execute numerical (not symbolic) computations of a new type and simplifies fields of Mathematics where the usage of the infinity and/or infinitesimals is necessary (e.g., divergent series, limits, derivatives, integrals, measure theory, probability theory, fractals, etc.). Numerous examples and applications are given.

Professor Mark Leeson - Nanoscale Communications

October 9, 2013 | 11:15 am - 12:00 pm

Mark Leeson graduated with First Class Honors in Electrical and Electronic Engineering from The University of Nottingham in 1986 and was awarded a PhD in Optoelectronics by the University of Cambridge in 1990. After working as a Network Analyst for NatWest Bank from 1990-92, Mark held academic appointments in London and Manchester before joining the University of Warwick as a Lecturer in March 2000. He became an Associate Professor in October 2006 and was promoted to Associate Professor (Reader) in October 2011. Mark's major research areas are nanoscale communications, evolutionary algorithms, network coding and communication systems. He has published approximately 220 journal papers, book chapters and conference papers in his fields of interest in addition to involvement with research projects worth about £2M to date. He held a Royal Academy of Engineering/Leverhulme Trust Senior Research Fellowship for the academic year 2010/11. Mark is a Member of the Institute of Physics (Chartered Physicist), the Society for the Study of Artificial Intelligence and the Simulation of Behavior, the UK Systems Society, a Fellow of the UK Higher Education Academy and a Senior Member of the Institute of Electrical and Electronic Engineers in the USA. He was also elected to the EPSRC Peer Review College in January 2003, and re-elected in 2006 and 2010.

Abstract: Today, it is difficult not to have come across the term nanotechnology which has spread into popular culture via the design and manipulation of entities at the nanoscale. However, the full impact of this technology will not be realised unless such devices are able to communicate with each other. This will enable the utilization of very small devices (at the nanometer scale) to perform socially useful tasks such as targeted medical treatments and data collection for climate change monitoring. Thus, the communication of information between nanoscale devices is a fast emerging field essential to the realization of their potential. Here, an overview of the options for communications between nanoscale devices is provided. This commences with a brief introduction to nano-machines followed coverage of the broad categories available for the communication



process. Molecular communication is chosen as an example since it is the most developed in the literature and in the work of the author. The modeling process for point-to-point diffusion-based communications is presented followed by representative transmission performance results. Then, the potential of error correction coding is discussed and results that take account of processing energy are summarized. Finally, results for the use of relaying and multilevel communications are discussed prior to overall conclusions being drawn.

Tutorials

Dr. Peter Sapaty, National Academy of Sciences of Ukraine | Ruling Distributed Dynamic Worlds with Spatial Grasp Technology

October 7, 2013 | 5:15 pm - 6:00 pm

Dr Peter Sapaty (educated in power networks & missile control), Chief Research Scientist, Director of Distributed Simulation and Control, Ukrainian Academy of Sciences, is with networking for 45 years. Except Ukraine, worked in Germany, UK, Canada and Japan as Alexander von Humboldt awardee, project leader, research professor and invited professor, created and chaired special interest group on Mobile Cooperative Technologies within Distributed Interactive Simulation (DIS) project in the US. Invented high-level distributed control technology used in different countries and resulted in a European Patent and two John Wiley books, with the third one in progress. Published more than 160 scientific papers worldwide on distributed system organizations. Current areas of interest: models and languages for coordination and simulation of distributed dynamic systems with application in cooperative robotics, emergency management, infrastructure protection, and fighting terrorism. Peter regularly served as workshop organizer, sessions chair, keynote and invited speaker at scientific and defense conferences in the UK, US, Japan, Portugal, Spain, Germany, Singapore, India, and Turkey. His bio is in Marquis Who's Who in the World and Cambridge Outstanding Intellectuals of the 21st Century.



Abstract: A challenging system philosophy, organizational model, and supporting control technology will be revealed that summarize the author's experience of dealing with distributed networked systems for more than four decades and in different (totally: seven) countries. The approach offered is based on holistic and gestalt principles reflecting the unique ability of human brain to grasp the whole first while interpreting parts and their relations as second, in the context of the whole--rather than vice versa as in traditional approaches. This capability has been effectively formalized and placed on advanced highly parallel and fully distributed technical platform often allowing for superior solutions in runtime management of large dynamic systems, sometimes even in comparison to human brain and its collectives. The technology developed uses high-level Spatial Grasp Language (SGL) describing propagation, decisions and operations in physical and virtual worlds and providing the direct presence in and over them. Its special syntax and semantics allow for parallel and distributed interpretation in dynamic networks (of computers, humans, robots, sensors, any other intelligent devices) with mission scenarios starting from any component and covering the whole system or its parts needed at run time, in a self-propagation, self-modification and self-replication mode. This being accompanied by hierarchical or horizontal feedback providing local and global awareness of distributed situations and supporting automatic decisions. Effectively expressing semantics of complex system operations and top decisions, SGL scenarios are often orders of magnitude shorter and simpler than in usual programming languages, making them easy to create and update at runtime, thus quickly responding to asymmetric situations and changing goals. This allows us to shift most of traditional organization routines (including propagation of data to remote operations or vice versa, movement and communication of system units in physical spaces, and overall command and control) to automated up to fully automatic levels while concentrating on system goals, efficiency, and survivability instead. A description of SGL will with its powerful space-grasping, space-matching and space control mechanisms, methodology and examples of programming in it in a holistic, integral mode will be provided. Organization of SGL interpreter will be discussed with its communicating copies embedded into key points of the systems to be investigated and controlled, where the interpreter can be installed in open or stealth mode, the latter if dedicated to operate in unknown or hostile environments. Numerous researched applications of this Spatial Grasp Technology (SGT) will be revealed in both civil and defense areas, with exemplary tasks programmed and explained in SGL. A comparison with other system organizations will be provided, especially those based on traditional multi-agent and interoperability principles, while offering a higher-order "over-operability" organizational and operational layer, in contrast and also in supplement to them. This layer, capable of guick assembling of any available human and technical resources into highly operable and intelligent systems with global awareness, consciousness and will, can adequately respond to asymmetric situations and threats and defeat other system organizations, if required.

Prof. Dorian Gorgan, Technical University of Cluj-Napoca & Dr. Gregory GIULIANI University of Geneva | enviroGRIDS project

October 9, 2013 | 10:15 am - 11:00 am

Prof. Dorian Gorgan is professor and PhD supervisor in Computer Science at the Technical University of Cluj-Napoca. He graduated Computer Science and Automation from "Politechnica" University of Timisoara, has PhD in Graphical Modeling and Simulation, Visual Programming, and Graphical User Interfaces at the Technical University of Cluj-Napoca. For two years he gave technical and scientifical consultancy in Autodesk's projects (in Milan, Italy) in the fields of location based services (LBS) and geographical information systems (GIS). He is the chair of the CGIS (Computer Graphics and Interactive Systems) Laboratory, director of the MedioGrid project, a Grid software and hardware infrastructure supporting the development of the environmental and geographical applications.

Dr. Gregory GIULIANI, Scientific collaborator at University of Geneva is a geologist and environment scientist who specialized in Geographical Information Systems (GIS) analyses and Spatial Data Infrastructures (SDI). After obtaining a degree in Earth Sciences, he went on to complete a master and a PhD in Environmental Sciences, specializing in remote sensing, GIS, and SDI. He previously worked as a GIS Consultant for the World Health Organization, as a University tutor in remote sensing and GIS and as a GIS Developer in a local Swiss GIS company. He also works at UNEP/GRID-Geneva since 2001 and is the focal point for Spatial Data Infrastructure (SDI). He is Work package leader in the FP7 enviroGRIDS project and the FP7 AFROMAISON project where he coordinates SDI development and implementation. Project manager of the FP7 EOPOWER project, he also participated in the FP7 ACQWA project. At GRID-Geneva, he is the lead developer of the PREVIEW global risk data platform (http://preview.grid.unep.ch). Participate and contribute actively to various Global Earth Observation Systems (GEOSS) activities.

Abstract: With 30 partners distributed in 15 countries, the enviroGRIDS project is contributing to the Global Earth Observation System of Systems (GEOSS) by promoting the use of web-based services to share and process large amounts of key environmental information in the Black Sea catchment (2.2 mio. km2, 24 countries, 160 million inhabitants). The main aim of the project is to assess water resource in the past, the present and the future, according to different development scenarios. The objective is also to develop datasets that are compatible with the European INSPIRE Directive on spatial data sharing across Europe. The data and metadata gathered and produced on the Black Sea catchment will be distributed through the enviroGRIDS geoportal. The challenge is to convince and help regional data holders to make available their data and metadata to a larger audience in order to improve our capacity to assess the sustainability and vulnerability of the environment.





Final Program

MONDAY, October 7, 2013

7:00 am – 9:00 am	Registration (Longford Foyer)				
9:00 am – 10:30 am	Opening	Opening Ceremonies Opening Keynote Address: Professor Kevin Warwick - The Disappearing Human-Machine Divide (Longford Suite)			
10:30 am – 11:00 am		АМ	Break and Networking (Longford	Foyer)	
11:00 am – 12:00 pm		Invited Speaker and Chair Address: Tony Shan - Big Data in Practice (Longford Suite)			
12:00 pm – 1:00 pm	Lunch (First Editions Restaurant)				
1:00 pm – 2:30 pm	Session 1: Intelligent Systems (Curtiss Suite)	Session 2: Communication (Correspondence Suite)	Session 3: Machine Vision (J&B Suite)	Session 4: Cloud Computing (Print and Perimeter Suite)	Session 5: Security (Convair Suite)
2:30 pm – 2:45 pm	Short Break (Longford Foyer)				
2:45 pm – 4:45 pm	Session 6: Intelligent Systems (Curtiss Suite) Session 7: Communication (Correspondence Suite) Session 8: Technology Trends (J&B Suite) Session 9: Cloud Computing (Print and Perimeter Suite) Session 10: Software (Convair Suite)				
4:45 pm – 5:15 pm	PM Break and Networking (Longford Foyer)				
5:15 pm - 6:00 pm	Tutorial Address: Dr. Peter Sapaty - Ruling Distributed Dynamic Worlds with Spatial Grasp Technology (Longford Suite)				

October 7, 2013

1:00 pm - 2:30 pm

Session 1: Intelligent Systems (Curtiss Suite) Chair: Haiming Liu	Session 2: Communication (Correspondence Suite) Chair: Mark Leeson	Session 3: Machine Vision (J&B Suite) Chair: Kevin Warwick	Session 4: Cloud Computing (Print and Perimeter Suite) Chair: Elhadj Benkhelifa	Session 5: Security (Convair Suite) Chair: Joerg Fritsch
202 - Alternate Biological	29 - Performance Analysis of Ad-	172 - An Improved System for	432 - Using OpenStack To Improve	411 - A Combined Approach to
Sequence Clustering Using Symbol Table	hoc Routing Protocols In Smart Metering Infrastructure	Detecting Natural Gas Leaks	Student Experience in an H.E. Environment	Prevent SQL Injection Attacks
		195 - FPGA Implementation for		377 - Enhanced TSFS Algorithm for
216 - A Novel Conformance	290 - Improving multiple	Stereo Matching Algorithm	390 - Architecting Mobile Cloud	Secure Database Encryption
Testing Technique For Agent	broadcasting of multimedia data		Computing Applications by RM-	
Interaction Protocols	traffic in wireless ad-hoc networks	203 - A new segmentation	ODP	33 - Parliamentary Oversight of
		architecture for texture matching		Cyber Security and Critical
230 - An Analytical Study of	363 - Tracking Anomalies in	using the LBP method	94 - Cloud Based Emails	Information Infrastructures in
Clustered File Space Properties	Vehicle Movements using Mobile		Boundaries and Vulnerabilities	Developing Countries
	GIS	315 - An exploratory study of		
232 - Incremental Support Vector		detecting emotion states using	427- Effective Technique for	90 - A Complete Binary Tree
Machines for Monitoring Systems	153 - Dynamic Adjustment of	eye-tracking technology	Allocating Servers to Support	Structure Block Cipher for real-
in Intensive Care Unit	Weighting and Safety Factors in		Cloud using GPS and GIS	time multimedia
	Playout Buffers for Enhancing VoIP			
	Quality			

October 7, 2013

2:45 pm - 4:45 pm

Session 6: Intelligent Systems	Session 7: Communication	Session 8: Technology Trends	Session 9: Cloud Computing	Session 10: Software Engineering
(Curtiss Suite)	(Correspondence Suite)	(J&B Suite)	(Print and Perimeter Suite)	(Convair Suite)
Chair: Elhadj Benkhelifa	Chair: Mark Leeson	Chair: Haiming Liu	Chair: Joerg Fritsch	Chair: Taiwo Ayodele
239 - Spinup-Capture Dynamics of Multi-Rotor Nanosatellites and Somersaulting Robots 337 - Recognition of Normal Forms with Tree Automata for Inductive Theorem Proving 53 - Fuzzy k-Competition Graphs 35 - Concept of Fuzzy Planar Graphs 338 - Fuzzy Data Management on Pores Arrangementfor Tropical Wood Species Recognition System	158 - The World as an Integral Distributed Brain under Spatial Grasp Paradigm 393 - Data Collection in WSNs with a Mobile Sink for a supervision application 245 - A Secure MAC Protocol for Cognitive Radio Networks (SMCRN) 187 - An Efficient Service Discovery Protocol for 6LoWPANs 420 - System Performance of Radio on Visible Light (RoVL) Communication System	85 - Towards Ambient Intelligence in Assisted Living: The Creation of an Intelligent Home Care 156 - An accessible, adaptive and multimodal digital TV framework and corresponding development tool 188 - Congressional Close Up: Automatically Exploring Anomalous Voting Behavior in the U.S. Congress 194 - Achieving Scalability in a Distributed Electronic Health Record SystemXin Zhang 211 - FPGA-based Reconfigurable Computer Systems	128 - Mobile Cloud Framework Architecture for Education Institutions 368 - The Standardisation of Cloud Computing:Trends in the State-of- the-Art and Management Issues for the Next Generation of Cloud 104 - A Generic Search Based Cloud Service Discovery Mechanism 186 - Goal-Driven Social Business Process Management	234 - A Generic Framework for Automated Quality Assurance of Software Models - Application of an Abstract Syntax Tree 235 - A Generic Framework for Evaluation Phase in Games Development Methodologies 358 - An Ameliorated Methodology for the Abstraction of Usecases from Software Requirements Specification 407 - Requirements Engineering Practices In Small and Medium Software Companies: An Empirical Study 416 - Critical success factors assessment in Software Projects

TUESDAY, October 8, 2013

9:00 am -10:00 am	Invited Speaker Address: Cyriel Kortleven - Break, Burn or Ban the Box (Longford Suite)				
10:00 am – 10:45 am	lr	nvited Speaker Address: Professor F	rank Zhigang Wang - Towards 20	20 Computing (Longford Suite	e)
10:45 am – 11:00 am		AM	1 Short Break (Longford Foyer)		
11:00 am – 1:00 pm	Session 11: Project and Poster Presentations (Curtiss Suite)	Session 12: Electronics (Correspondence Suite)	Session 13: Technology Trends (J&B Suite)	Session 14: e-Business (Print and Perimeter Suite)	Session 15: e-Learning (Convair Suite)
1:00 pm – 2:00 pm	Lunch (First Editions Restaurant)				
2:00 pm - 3:30 pm	Session 16: Intelligent Systems (Curtiss Suite)	Session 17 : Software Engineering (Correspondence Suite)	Session 18: Technology Trends (J&B Suite)	Session 19: Security (Print and Perimeter Suite)	Session 20: e-Learning (Convair Suite)
3:30 pm - 4:00 pm	PM Break and Networking (Longford Foyer)				
4:00 pm – 6:00 pm	Session 21: Intelligent Systems (Curtiss Suite)	Session 22 : Cloud Computing (Correspondence Suite)	Session 23: Technology Trends (J&B Suite)	Session 24: Security (Print and Perimeter Suite)	Session 25: Technology Trends (Convair Suite) Chair:

October 8, 2013

11:00 am - 1:00 pm

Session 11: Project and Poster Presentations (Curtiss Suite) Chair: Liming Chen and Peter Sapaty	Session 12: Electronics (Correspondence Suite) Chair: Mark Leeson	Session 13: Technology Trends (J&B Suite) Chair: Joerg Fritsch	Session 14: e-Business (Print and Perimeter Suite) Chair: Taiwo Ayodele	Session 15: e-Learning (Convair Suite) Chair: Haiming Liu
Project 1 - Context Processing for Automotive Human-Machine Interfaces Poster 11 - Collaborative experience teacher-students at the University of Alicante Poster 12 - An Efficient Collaborative Infrastructure for Wide Area Surveillance Network Poster 7 - Diversity-enhanced particle swarm optimizer and its application to optimal flow control of sewer networks Poster 3 - CMS Options For Creating Electronic Textbooks For Agronomical Subjects	192 - Simulation based characterization of negative permeability plasmonic structures at X band 291 - Managing the Challenges of E-Waste Recycling in Nigeria 190 - Analytical Characterization of Cut-Wire and Thin-Wire Structures for Metamaterial Applications 51 - The Low Noise Amplifier Isolation and Linearity Measurement at Double Antenna LEO Satellite Ground Station	161 - Software Project Management in Virtual Teams 406 - Risks factors identification and assessment in Virtual Projects of Software Industry: A Survey Study 276 - Assessment Tools and Techniques for e-Learning Evaluation: Usage Analysis and Survey Sampling 361 - Optimization Design of Micro channel Heat Sink Based on Taguchi Method and Simulation 369 - Approximate Bit Error Rate for M-ary Phase Shift Keying (M-PSK) using Maximum Ratio Combining (MRC) Technique over Fading Channels.	314 - Micro Sourcing: The SWOT Analysis On The Demand, Supply And Platforms 375 - How User Experience is Understood? 339 - GA Enabled Ontology for Platform Free Dynamic Semantic Web 286 - A Framework for Generating a Domain Specific Inspection Evaluation Method A Comparative Study on Social Networking Websites 354 - Improved Technology Acceptance Model applied to study Enterprise Resource Planning usage	251 - A Set Of Interactions To Help To Resolve 3D Geometry Problems 105 - Virtual and Augmented Reality Based Assembly Design System for Personalized Learning 106 - Mining Fuzzy Motivation Indicator in Learning environment through Human Computer Interaction 169 - Development of Learning Object from IP-Based Television Programme 205 - Extending the TAM model to empirically investigate the students' behavioral intention to use e-learning in developing Countries

October 8, 2013

2:00 pm - 3:30 pm

Session 16: Intelligent Systems (Curtiss Suite) Chair: Mark Leeson	Session 17: Software Engineering (Correspondence Suite) Chair: Liming Chen and Peter Sapaty	Session 18: Technology Trends (J&B Suite) Chair: Roy Sterritt	Session 19: Security (Print and Perimeter Suite) Chair: Joerg Fritsch	Session 20: e-Learning (Convair Suite) Chair: Taiwo Ayodele
386 - Application of Neuromorphic Visual Processing in Pedestrian Detection Technology 143 - An Efficient Classification Using Support Vector Machines 199 - Comparative study on Different Adaptation Approaches Concerning a Sip and Puff Controller for a Powered Wheelchair 277 - A Novel Feature Selection based on information gain using WordNet	198 - Challenges of Project Management in Global Software Development: Initial Results 260 - The Acclimations of the Hybrid Petri Net Theory for Real- Time Embedded System Modelling for Hybrid Plant 346 - Design of standard of real- time data acquisition from SMD devices and integration with ERP system 351 - Reducing the gap between security audit and software engineering methods	341 - Software ageing measurement and classification using Goal Question Metric (GQM) approach 371 - Technology for Psychosocial Interventions for Individuals with Alzheimer's: Reminiscence Therapy and Monitoring Progressive Decline of Cognitive Abilities 389 - Constructing hybrid architectures and dynamic services in Cloud BPM 380 - Leveraging Smart Monitoring and Home Security Technology for Assisted Living Support	151 - Informed Symmetric Encryption Algorithm for DICOM Medical Image based on N-grams 217 - Formal Specification of CA- UCON model using CCA 320 - Measuring of Reliability of Network Anomalies Detection Using Methods of Discrete Wavelet Analysis 343 - Time variant approach towards Symmetric Key	136 - Selection of Touch Gestures for Children's Applications 254 - The Shift towards an Innovation-Based Model of Learning: A Blueprint for the Future of Asian Education Systems in the Age of Technology 381 - Electronic Lecturing and Teaching Aid using Collaborative Smart Phones 147 - Use Of Semantic Wiki As A Capturing Tool For Lessons Learned In Project Management

October 8, 2013

4:00 pm - 6:00 pm

Session 21: Intelligent Systems (Curtiss Suite) Chair: Liming Chen and Peter Sapaty	Session 22: Cloud Computing (Correspondence Suite) Chair: Elhadj Benkhelifa	Session 23: Technology Trends (J&B Suite) Chair: Taiwo Ayodele	Session 24: Security (Print and Perimeter Suite) Chair: Joerg Fritsch	Session 25: Technology Trends (Convair Suite) Chair: Mark Leeson
49 - Use of Sampling and Ant Colony Optimization for predicting support in Recommender Systems 148 - Pathology of Knowledge Management in Universities 256 - Intelligent Provisioning using Ontology for Ubiquitous Computing 281 - State Based Testing using Swarm Intelligence 332 - Hemispheric brainwave activity of violinists performing with music notation and without music notation	322 - Deploying Cloud Services in Mobile Networks 429 - A case study analysis of risk, trust and control in cloud computing 428 - Self-Management for Cloud Computing 430 - An Integrated Framework for Evaluating Big-Data Storage Solutions – IDA Case Study	196 - Nonholonomic Control of a Planar Prismatic-Revolute Underactuated Manipulator 403 - Wearable Physical and Psychological Health Monitoring System 289 - Detecting Software Aging in Safety-Critical Infrastuctures 131 - Heterogeneous Parallel Facilities	244 - Autonomous Synergy with Biometric Security and Liveness Detection 34 - Home User Security- from Thick Security-oriented Home Users to Thin Security- oriented Home Users 293 - Universal Representation of Service Performing Environment in SOA Systems 180 - A Blue Print Practical Implementation of PKI using Open PGP at University of Tabuk 210 - Toward Assessing the Impact of Mobile Security Issues in Pedagogical Delivery: A Mobile Learning Case Study	233 - HTM5-Trade Model for Relationship Based Trade Modelling in Multi Agent Systems 391 - On the numerical analysis of contact stresses in a Total Knee Replacement (TKR) 285 - Mode of Information Processing 362 - Real Time Control of Multi- Agent Mobile Robots with Intelligent Collision Avoidance System

WEDNESDAY, October 9, 2013

9:00 am – 9:45 am	Invited Speaker Address: Professor Yaroslav D. Sergeyev - Infinity Computer (Longford Suite)				
9:45 am – 10:15 am	AM Break and Networking (Longford Foyer)				
10:15 am – 11:00 am	Tutorial Ad	Tutorial Address: Prof. Dorian Gorgan & Dr. Gregory GIULIANI - enviroGRIDS project (Longford Suite)			
11:00 am – 11:15 am	Short Break (Longford Foyer)				
11:15 am – 12:00 pm	Invited Speaker Address: Professor Mark Leeson - Nanoscale Communications				
12:00 pm – 1:00 pm	Lunch (First Editions Restaurant)				
01:00 pm – 3:00 pm	Session 26: Intelligent Systems (Curtiss Suite) Session 27: Software Engineering (Correspondence Suite) Session 28: Social Computing (J&B Suite) Session 29: Communication (Print and Perimeter Suite)				
3:00 pm – 3:15 pm	PM Break and Networking (Longford Foyer)				
3:15 pm – 5:15 pm	Session 30: Intelligent Systems (Curtiss Suite) Session 31: Electronics (Correspondence Suite) Session 32: Machine Vision (J&B Suite) Session 33: Technology Trends (Print and Perimeter Suite)				
5:15 pm – 5:45 pm	Conference Closing Ceremony (Longford Suite)				

October 9, 2013

1:00 pm - 3:00 pm

Session 26: Intelligent Systems	Session 27: Software Engineering	Session 28: Social Computing	Session 29: Communication
(Curtiss Suite)	(Correspondence Suite)	(J&B Suite)	(Print and Perimeter Suite)
Chair: Peter Sapaty	Chair: Taiwo Ayodele	Chair: Haiming Liu	Chair: Mark Leeson
329 - A Fuzzy Logic Based Approach to Bandwidth Allocation in Network Virtualization 336 - Adaptive Geometric Angle-based Algorithm with Independent Objective Biasing for Pruning Pareto-Optimal Solutions 387 - Finding Relevant Dimensions in Application Service Management Control: a Features Selection Approach 82 - Polarized Score Distributions in Music Ratings and the Emergence of Popular Artists 279 - Introducing Adaptive Artificial Bee Colony Algorithm and Using It in Solving Traveling Salesman Problem	39 - Factors Effecting Service Oriented Architecture Implementation 38 - Risk Management System for ERP Software Project 374 - An enhanced Use Case diagram to model Context Aware Systems 384 - Abstract Conceptual Database Model Approach 394 - Trials and Tribulations of BCI Control Applications	347 - Formulating Cohesive Digital Ecosystem of Micro Sourcing Business Process in Malaysia 144 - Evaluating community structure in the large network with random walks 101 - Socio-materiality of online music ensembles: An analysis based on cultural artifacts & affordances 252 - Developing a Theoretical Framework of Social Network Site (SNS) Appropriation in Family Context 25 - Evaluating the Power of Homophily and Graph Properties in Social Network: Measuring the Flow of Inspiring Influence Using Evolutionary Dynamics	15 - A New Theory for Celestial Orbits 27 - Predicting mobile network bandwidth fluctuation to enhance video stream service quality 306 - Modelling of Intrinsic Conducting Polymer for Wi-Fi Electromagnetic Interference Shielding 350 - Performance Analysis of Uplink Fractional Frequency Reuse using Worst Case Signal to Interference Ratio 385 - Radiation Tests on a Bluetooth Based Front-End Electronic Device Towards a Subcutaneous Continuous Glucose Monitoring Sensor.

October 9, 2013

3:15 pm - 5:15 pm

Session 30: Intelligent Systems (Curtiss Suite) Chair: Taiwo Ayodele	Session 31: Electronics (Correspondence Suite) Chair: Mark Leeson	Session 32: Machine Vision (J&B Suite) Chair: Peter Sapaty	Session 33: Technology Trends (Print and Perimeter Suite) Chair: Haiming Liu
319 - Implementing Just-In-Time (J.I.T) methodologies within a Libyan cement factory	100 - A tool to reduce the undercut/over- etch error in a Switched Capacitor filter: Design, Implementation and Verification	342 - Zernike Moment Feature Extraction for Handwritten Devanagari Compound Character Recognition	92 - Towards Effective Eye Pointing for Gaze-Enhanced Human-Computer Interaction
397 - Development of a Network-based Intrusion Prevention System using a Data Mining Approach	138 - Developing of an Industrial Manufacturing Process Plan, Mathematical Modeling of Process Plan and Its Convex Constraint Analysis	241 - Solving the perspective Shape From Shading problem Using a new integration method	302 - Wireless System for Detecting Human Temperature 22 - Waiting Blocked-Tree Type Deadlock
395- Challenges in Baseline Detection of Cursive Script Languages	206 - Adaptive waveform design for target	328 - Coloring of Grayscale Images using Prioritized Source Propagation Method	Detection
149 - Utilisation of On-line Machine Learning for SCADA System Alarms	classification 272 - Programmable Ion Counter	18 – Fingerprint Matching by Neighbourhood Characteristics	312 - Doctor's perspective for Use of EHR Visualization Systems in Public Hospitals
Forecasting 66 - Towards an Organizational Model for	191 - Metamaterial Plane-Slab Focusing and Sub-wavelength ImagingThe Concept,	268 - Mobile Augmented Reality Applications to Discover New Environments	378 - Web Searching Behaviour for Academic Resources
Real Time Multi-Agent System Specification	Analysis and Characterization		

Free Post Conference London Tour

THURSDAY, October 10, 2013

09:30 am - 10:00 am	Pickup from Thistle Hotel
11:30 am - 5:00 pm	London Tour and Thames River Cruise
05:30 pm	Drop-off to Thistle Hotel



Presentation Guidelines

Paper Presenters

- 1. All presenters of oral presentations must report to the session chair in advance of each session.
- 2. Presenters can either use the laptop provided in each room (PC) or connect their own laptop to the projector. If you are bringing your own computer to connect to the projector: a VGA cable with male connector will be provided for hooking up your laptop. Most computers require an adapter that varies by brand (Mac/PC) and even by model. Please ensure you bring the proper adapter that will fit your computer (no adapters will be available on site). It would be a good idea to arrive at the room 20 minutes early to test connecting your computer to the projector, so as not to delay the presentation during the actual session.
- 3. If using the conference-provided laptop, presentations should be uploaded USB flash drive/pen drive during the break before the beginning of the sessions at the latest. Only Power Point presentations (.ppt/.pptx) and Adobe Acrobat files (.pdf) will be accepted, as the available software includes Microsoft Office and Adobe Acrobat Reader. If you have a video or audio file embedded in the presentation we recommend using a standard video and audio codec compatible with Microsoft PowerPoint.
- 4. Some of the lecture presentations will be given in quite large lecture halls. We recommend that you prepare your slides according to the following guidelines to ensure that the entire audience will be able to see your presentation. Your Session Chair may contact you in advance of the conference to request copies of your visual aids for approval before the conference.
- 5. Presentation time is critical; each paper is allocated 20 minutes for lecture sessions. This time includes setup and questions. We recommend that presentation of your slides should take about 15 minutes, leaving 5 minutes for setup, introduction, summary, and questions from the audience.
- 6. A reasonable strategy is to allocate about 2 minutes per slide when there are equations or important key points to make, and one minute per slide when the content is less complex. Slides attract and hold attention, and reinforce what you say provided you keep them simple and easy to read. Plan on covering at most 6 points per slide, covered by 6 to 12 spoken sentences and no more than about two spoken minutes.
- 7. Make sure each of your key points is easy to explain with aid of the material on your slides. Do not read directly from the slide during your presentation. You shouldn't need to prepare a written speech, although it is often a good idea to prepare the opening and closing sentences in advance. It is very important that you rehearse your presentation in front of an audience before you give your presentation.

Poster Presenters

- 1. Posters will have dedicated sessions during the conference.
- 2. Please assure the poster is placed on the board before the beginning of the poster session. Authors are required to stand by their posters during the whole poster session.
- 3. The poster size must not exceed the A0 (84 cm X 118 cm) portrait format. Please use an appropriate font size for the posters so that they are readable by the participants 1.5 meter away. The poster message should be clear and understandable without oral explanation.
- 4. The poster presenter must bring the poster already printed. There is no provision to print the poster near or at the venue.
- 5. There will be provision of Thumb Pins at the venue. If you would like to setup your poster in another manner, kindly bring along the necessary items.

Have a great trip back home and see you next year in Science and Information Conference 2014!