2014 International Conference on Telecommunications and Multimedia

(TEMU 2014)

Heraklion, Crete, Greece
28-30 July 2014
Program

Opening Ceremony

Key Note Talk on "What's behind your smartphone icons? A brief tour of behind-the-scenes signaling and QoS for multimedia services"

Coffee Break

Key Note Talk on "Spectrum Utilisation towards the 5G Evolution"

Key Note Talk on "Quality Assurance and Accreditation in Greek Higher Education: The Informatics and Telecommunication Studies Paradigm - Present and Future"

Lunch Break

S1: Next Generation Services and Service Delivery Platforms I

**Interactive Mobile Application, Web Technologies and Fire Simulations in the Service of Forest Fire Volunteers**

Theoharis Mexis (Centre for Research and Technology Hellas, Greece), Kosmas Dimitropoulos (Centre for Research and Technology Hellas, Informatics and Telematics Institute, Greece) and Nikos Grammalidis (Centre for Research and Technology Hellas, Greece)

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**A DIAMETER Based Security Framework for Mobile Networks**

Quang Thanh Tran (Technische Universität Berlin & Fraunhofer FOKUS, Germany), Yacine Rebahi (Fraunhofer Institut Fokus, Berlin, Germany) and Thomas Magedanz (TU Berlin / Fraunhofer FOKUS, Germany)

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**An IMS-based Interoperable Architecture for Heterogeneous Emergency Services**

Fidel Liberal (University of the Basque Country, Spain), Jose Oscar Fajardo (University of the Basque Country, Spain), Mikel Ramos (University of the Basque Country, Spain), Harilaos Koumaras (NCSR Demokritos, Greece), Christos Sakkas (NCSR Demokritos, Greece) and Michail Alexandros Kourtis (University of the Aegean, Greece)

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**A Multi-Mission Service Platform for Satellite-based Wide Area Surveillance**

Stratis Konakas (Space Hellas S.A., Greece), Spiros Pantazis (Space Hellas SA, Greece), Georgios Gardikis (Space Hellas S.A., Greece), Socrates Costicoglou (Space Hellas SA, Greece), Ilias Andrikopoulos (Space Hellas S.A., Greece), Javier Mulero Chaves (German Aerospace Center (DLR), Germany) and Cristina Parraga Niebla (German Aerospace Center (DLR), Germany)

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**Virtual Network Functions Exploitation through a Prototype Resource Management Framework**

George Mastorakis (Technological Educational Institute of Crete, Greece), Evangelos K. Markakis (University of the Aegean, Greece), Evangelos Pallis (Technological Educational Insitute of Crete, Greece), Constandinos X. Mavromoustakis (University of Nicosia, Cyprus) and Georgios Skourletopoulos (Scientia Consulting S.A., Greece)

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S2: Quality of Service and Quality of Experience

**QoE Fairness, HTTP Adaptive Streaming and IDVB-T: The AWM approach**
Anargyros Sideris (University of the Aegean & Technological Educational Institute of Crete, Greece), Evangelos K. Markakis (University of the Aegean, Greece), Andreas Trigonis (Technological Educational Institute of Crete, Greece), George Alexiou (Technological Educational Institute of Crete, Greece), Evangelos Pallis (Technological Educational Institute of Crete, Greece) and Harry Skianis (University of the Aegean, Greece)
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**A Quantitative Method for Graphical Representation of H.264 Video Content Dynamics**
Michail Alexandros Kourtis (University of the Aegean, Greece), Harilaos Koumaras (NCSR Demokritos, Greece), Harry Skianis (University of the Aegean, Greece) and Fotis Lazarakis (NCSR Demokritos, Institute of Informatics & Telecommunications, Greece)
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**A Reliable Buffered Approach for Measuring Usage of Web Video**
Saayan Mitra (Adobe, USA) and Viswanathan Swaminathan (Adobe Systems Inc, USA)
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**A New Approach for Spatial Audio Quality Assessment**
Abderrahmane Smimite (Laboratoire de Traitement et Transport de l'Information & Digital Media Solutions, France), Azeddine Beghdadi (L2TI, Universite Paris 13, France), Ken Chen (Université Paris 13, France) and Ouadie Jafjaf (Université Paris 13, France)
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**Quality Assurance and Accreditation in Greece: A critical look at the Informatics and Telecommunications Departments**
Vassilios Tsiantos (Technological Educational Institute of Eastern Macedonia and Thrace, Greece), Sevaste Chatzifotiou (Democritus University of Thrace, Greece) and Kleomenis Oikonomou (Technological Education Institute of Athens, Greece)
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Coffee Break

S3: Next Generation Services and Service Delivery Platforms II

**Home-Box based collaborative caching strategy: An asset for Content Delivery Networks**
Joachim Bruneau-Queyreix (University of Bordeaux, France), Daniel Négru (University of Bordeaux, France) and Jordi Mongay Batalla (National Institute of Telecommunications & Warsaw University of Technology, Poland)
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**Evaluating Selfishness Impact on MANETs**
Dimitra G. Kampitaki (University of Macedonia Greece & Computer Networks & Telematics Applications Laboratory, Greece), Eirini Karapistoli (University of Macedonia, Greece) and Anastasios A. Economides (University of Macedonia, Greece)
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**A hyper-box approach using relational databases for large scale machine learning**
Stelios Papadakis (Technological Educational Institute of Crete, Greece), Evangelos Stykas (Snapette INC., Greece), George Mastorakis (Technological Educational Institute of Crete, Greece) and Constantinos X. Mavromoustakis (University of Nicosia, Cyprus)
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**Efficient Event Detection in Public Transport Tracking**
Ármin Petkovics (Budapest University of Technology and Economics, Hungary) and Karoly Farkas (Budapest University of Technology and Economics, Hungary)
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**Energy Consumption Management in Smart Homes: an M-Bus Communication System**
Roberto Cherchi (University of Cagliari, Italy), Giuseppe Colistra (University of Cagliari, Italy), Virginia Pilloni (University of Cagliari, Italy) and Luigi Atzori (University of Cagliari, Italy)
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S4: Quality and Performance of Wireless & Mobile Networks

Enhanced Hybrid Positioning in Wireless Networks I: AoA-ToA
Muhammad Waqas Khan (University of Leeds, United Kingdom), Naveed Salman (University of Leeds, United Kingdom) and Andrew H. Kemp (University of Leeds, United Kingdom)
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Enhanced Hybrid Positioning in Wireless Networks II: AoA-RSS
Muhammad Waqas Khan (University of Leeds, United Kingdom), Naveed Salman (University of Leeds, United Kingdom) and Andrew H. Kemp (University of Leeds, United Kingdom)
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Evaluation of a Transmission Count-Efficient Metric for Energy-Aware Routing in WSNs
Lambros Sarakis (Technological Educational Institute of Sterea Ellada, Greece), Helen Leligou (TEI of Chalkida, Greece), Panagiotis Karkazis (Technical University of Crete, Greece), Terpsichori-Helen Velivassaki (Technological Educational Institute of Sterea Ellada, Greece) and Theodore Zahariadis (TEI of Chalkida & Synelixis Solutions Ltd, Greece)
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Performance Analysis of Reactive Routing Protocols in Mobile Ad hoc Networks
Michalis Papadopoulos (University of Nicosia, Cyprus), Constantinos X. Mavromoustakis (University of Nicosia, Cyprus), Georgios Skouletopoulos (Scientia Consulting S.A., Greece), George Mastorakis (Technological Educational Institute of Crete, Greece) and Evangelos Pallis (Technological Educational Insitute of Crete, Greece)
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Improving BitTorrent Content Delivery over Broadcast Networks
Evangelos K. Markakis (University of the Aegean, Greece), Harry Skianis (University of the Aegean, Greece), Anargyros Sideris (University of the Aegean & Technological Educational Institute of Crete, Greece) and Evangelos Pallis (Technological Educational Insitute of Crete, Greece)
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End of Day 1

Key Note Talk on "The role of IPv6 in IOT, SDN, CC and 5G"

Key Note Talk on "Digital Communications over Fast Fading Channels"

Coffee Break

Panel Discussion on "Internet of Things Perspectives"

Lunch Break

S5: Wireless Communications I

Cognitive VANET with Enhanced Priority Scheme
Joanne Mun-Yee Lim (SEGi University & Multimedia University, Malaysia), Yoong Choon Chang (Multimedia University, Malaysia), Mohamad Yusoff Alias (Multimedia University & Academic Honorary Visitor at University of Manchester, Malaysia) and Jonathan Loo (Middlesex University, United Kingdom)
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A High Throughput H-ARQ Technique with Faster-than-Nyquist Signaling
Francisco Ganhão (Universidade Nova de Lisboa, Portugal), Bruno Cunha (FCT-UNL, Portugal), Luis Bernardo (Universidade Nova de Lisboa, Portugal), Rui Dinis (Faculdade de Ciências e Tecnologia, University Nova de Lisboa, Portugal) and Rodolfo Oliveira (Nova University of Lisbon, Portugal)
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Low Complexity Multiple User Detection for SC-FDE with OQPSK Signals
Miguel Luzio (Instituto de Telecomunicações/UNINOVA/FCT-UNL, Portugal), Rui Dinis (Instituto de Telecomunicacoes & FCT-UNL, Portugal) and Paulo Montezuma (FCT-UNL, Portugal)
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Satellite-Based Sensor Networks: M2M Sensor Communications and Connectivity Analysis
Stavroula Vassaki (National Technical University of Athens, Greece), Georgios Pitsiladis (National Technical University of Athens, Greece), Charilaos Kourogiorgas (National Technical University of Athens, Greece), Marios I. Poulakis (National Technical University of Athens, Greece), Athanasios D. Panagopoulos (National Technical University of Athens, Greece), Georgios Gardikis (Space Hellas S.A., Greece) and Socrates Costicoglou (Space Hellas SA, Greece)
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LTE-A Interworking for Seamless Service Provisioning
Angelos Michalas (Technological Education Institute of Western Macedonia, Greece), Angeliki Sgora (University of Piraeus & VTT Technical Research Centre of Finland, Greece) and Dimitrios D. Vergados (University of Piraeus, Greece)
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S6: Antennas, Propagation and Measurements

Performance of an Ideal Wireless Orbital Angular Momentum Communication System Using Multiple-input Multiple-output Techniques
Kwasi Adu-Boahen Opare (MobileLink LAB, University of Electronic Science and Technology, P.R. China) and Yujun Kuang (University of Electronic Science and Technology of China, P.R. China)
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IWO-based Synthesis of Log-Periodic Dipole Array
Zaharias D Zaharis (Aristotle University of Thessaloniki, Greece), Christos Skeberis (Aristotle University of Thessaloniki, Greece), Pavlos Lazaridis (Alexander Technological Educational Institute of Thessaloniki, Greece), Dimitrios Stratakis (Technological Educational Institute of Crete, Greece) and Thomas Xenos (Aristotle University of Thessaloniki, Greece)
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ZAM Distribution Analysis of Radiowave Ionospheric Propagation Interference Measurements
Christos Skeberis (Aristotle University of Thessaloniki, Greece), Zaharias D Zaharis (Aristotle University of Thessaloniki, Greece), Dimitrios Stratakis (Technological Educational Institute of Crete, Greece) and Thomas Xenos (Aristotle University of Thessaloniki, Greece)
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Noise Reduction for Accurate Power Measurements of Low Level Signals
Dimitrios Stratakis (Technological Educational Institute of Crete, Greece), A. Miaoudakis (Technological Educational Institute of Crete, Greece), George Matorakos (Technological Educational Institute of Crete, Greece), Evangelos Pallis (Technological Educational Institute of Crete, Greece), Thomas Xenos (Aristotle University of Thessaloniki, Greece), Traianos Yioultsis (Aristotle University of Thessaloniki, Greece) and Constantinos X. Mavromoustakis (University of Nicosia, Cyprus)
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Coffee Break

S7: Wireless Communications II

A new approach for a better recovery of cluster head nodes in underwater sensor networks
Kyriakos Ovaliadis (University of Portsmouth, United Kingdom), Nick Savage (University of Portsmouth, United Kingdom) and Vassilios Tsiantos (Technological Educational Institute of Eastern Macedonia and Thrace, Greece)
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AOA estimation for coexisting UWB signals with multipath channels
Hsin-Chin Liu (National Taiwan University of Science and Technology, Taiwan) and Cheng-Wei Hsuan (National Taiwan University of Science and Technology, Taiwan)
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Low complexity LDPC coded IB-DFE for multilevel modulations and coded OFDM: comparison and complexity trade-offs
Paulo Montezuma (FCT-UNL, Portugal), Daniel Marques (FCT-UNL, Portugal) and Rui Dinis (Instituto de Telecomunicacoes & FCT-UNL, Portugal)
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Design of Good Constellations for Single-Subcarrier Intensity-Modulated Optical Systems
Marko Beko (ULHT/UNINOVA & UNINOVA, Caparica, Portugal), Rui Dinis (Faculdade de Ciências e Tecnologia, University Nova de Lisboa, Portugal), Miroslava Raspopovic (Belgrade Metropolitan University, Serbia), Vlatko Lipovac (University of Dubrovnik, Croatia) and Dzenan Strujic (Institute of Modern Technology Montenegro, Montenegro)
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Enabling Wireless Prosuming in 5G Networks
Nikolaos Nomikos (University of the Aegean, Greece), Prodromos Makris (University of Patras & Computer Technology Institute, Greece), Dimitrios N Skoutas (University of the Aegean, Greece), Demosthenes Vouyioukas (University of the Aegean, Greece) and Harry Skianis (University of the Aegean, Greece)
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S8: e-Services and Interactive Applications

Ambient Affiliation on Twitter: A Case Study on Organic Farming
Sofia Kozaki (TEI of Crete, Greece) and Demosthenes Akoumianakis (Advanced Technological Education Institution of Crete, Greece)
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Collaborative Music Composition as Virtual Work across Boundaries
George Vlachakis (ATEI, Greece), Anastasios Kalaentzis (Technological Education Institution of Crete, Greece) and Demosthenes Akoumianakis (Advanced Technological Education Institution of Crete, Greece)
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Discovering the Impact of User Profiling in E-Services
Kleanthis Gatziolis (University of Peloponnese, Greece) and Anthony Boucouvalas (University of Peloponnese, Greece)
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Future Proof Analytics techniques for Web 2.0 Applications
Constantine Aivalis (Technological Education Institute of Crete, Greece) and Anthony Boucouvalas (University of Peloponnese, Greece)
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Building a Gait Analysis Framework for Parkinson’s Disease Patients: Motion Capture and Skeleton 3D Representation
Ioannis Pachoulakis (Technological Educational Institute of Crete, Greece) and Konstantinos Kourmoulis (TEI of Crete, Greece)
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**Galla Dinner**

**Special Session on "3D Multimedia Transmission over Future Networks"**

*Adaptive Video Streaming on top of Web3D A bridging technology between X3DOM and MPEG-DASH*

Kostas Kapetanakis (Technological Educational Institute of Crete, Greece), Spyros Panagiotakis (Technological Educational Institute of Crete, Greece), Athanasios G. Malamos (Technological Educational Institute of Crete, Greece) and Markos Zampoglou (University of Macedonia, Greece)

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*Predictive Multicast Group Management for Free Viewpoint Video Streaming*

Árpád Huszák (Budapest University of Technology and Economics, Hungary)

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*A Kinect-Based Framework For Better User Experience in Real-Time Audiovisual Content Manipulation*

Emmanouil Potetsianakis (Telecom ParisTech, France), George Triantafyllidis (Aalborg University, Copenhagen, Denmark) and Emmanouil Ksylakis (Technological Educational Institute of Crete, Greece)

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*Scene integration for virtual worlds*

Michael Kalochristianakis (Technological Educational Institute of Crete & University of Crete, Greece), Kostas Kontakis (Technological Educational Institution of Crete, Greece), Kostas Kapetanakis (Technological Educational Institute of Crete, Greece) and Athanasios G. Malamos (Technological Educational Institute of Crete, Greece)

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*Stereo Video Quality Evaluation in Heterogeneous Networking Conditions*

George Papadogiannopoulos (Hellenic Open University & University of Patras, Greece), Tasos Dagiuklas (Hellenic Open University & University of Patras, Greece), Ilias Politis (Hellenic Open University & University of Patras, Greece), Asimakis Lykourgiotis (University of Patras, Greece) and Stavros Kotsopoulos (Wireless Telecommunications Laboratory, Greece)

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*Subjective and Objective Evaluation and Packet Loss Modeling for 3D Video Transmission over LTE Networks*

Moustafa Nasralla (Kingston University, United Kingdom), Chaminda T. E.R. Hewage (University of Kingston, United Kingdom) and Maria G. Martini (Kingston University, United Kingdom)

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*An Evaluation of Multi-view Video Transmission Performance on Long Term Evolution Networks*

Gloria-Anne Ellul (University of Malta, Malta) and Carl J. Debono (University of Malta, Malta)

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**Coffee Break**

**Panel Discussion on "3D Content-Aware Networking Environment"**

**Closing Ceremony**