

## Program at a Glance

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Day 1: Monday, November 28, 2016	
Time	Program
09:00–12:15, 13:45–17:00	Students' Poster Session
<b>Morning</b>	
07:30 – 09:30	Registration & Welcome Light Breakfast
09:30 – 10:00	Opening Ceremony
10:00 – 11:00	<b>Keynote I:</b> Introduction to Data Value <b>Steve Todd</b> , DELL Technologies Fellow VP of Corporate Strategy and Innovation, DELL EMC
11:00 – 11:30	Coffee Break
11:30 – 12:30	<b>Keynote II:</b> The Future of Information Security <b>Prof. Bart Preneel</b> , KU Leuven, Dept. Electrical Eng.-ESAT, COSIC
12:30 – 13:30	Lunch
<b>Afternoon</b>	
13:30 – 15:00	<b>Tutorial I:</b> Using the Cloud for Teaching and Research <b>Dr. Khaled Salah</b> , Professor, ECE Department, Khalifa University of Science, Technology and Research, UAE
15:00 – 15:15	Coffee Break
15:15 – 17:00	Paper Sessions (D1S1, D1S2, D1S3)
20:00 – 22:00	Gala Dinner (Rotana Hotel)

Day 2: Tuesday, November 29, 2016	
Time	Program
<b>Morning</b>	
07:30 – 08:00	Registration & Light Breakfast
08:00 – 09:00	Keynote III: Learning, data representations, and the development of companion technology <b>Dr. Günther Palm</b> , Director of the Institute of Neural Information Processing University of Ulm
09:00 – 10:30	Tutorial II: MDD + DSL = Software Development on Steroids <b>Dr. Maged Elaasar</b> , Senior Software Architect, NASA Jet Propulsion Laboratory, California Institute of Technology, Pasadena, USA
10:30 – 10:45	Coffee Break

<b>10:45 – 12:30</b>	Paper Sessions (D2S1, D2S2, D2S3)
<b>12:30 – 13:30</b>	Lunch
<b>Afternoon</b>	
<b>13:30 – 15:00</b>	Tutorial III: How and Why blockchain will revolutionize the economy? Business Transformation and Innovation Principal <b>Dr. Rahma Beaugrand</b> , Business Transformation and Innovation Principal, SAP Middle East and North Africa LLC
<b>15:00 – 15:15</b>	Coffee Break
<b>15:15 – 17:00</b>	Paper Sessions (D2S4, D2S5, D2S6)

## Technical Program Details

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<b>Day 1: Monday, November 28, 2016</b>
<b>Poster Session</b> <b>Time: 09:00 - 12:15, 13:45 – 17:00</b> <b>Room: Function Area</b>
<b>Keynote I: Introduction To Data Values</b> <b>Presenter:</b> Steve Todd, DELL Technologies Fellow ,VP of Corporate Strategy and Innovation, DELL EMC <b>Time: 10:00 - 11:00</b> <b>Room: Auditorium</b>
<b>Keynote II: The Future of Information Security</b> <b>Presenter:</b> Prof. Bart Preneel, University of Leuven, Dept. Electrical Eng.-ESAT, COSIC. Belgium <b>Time: 11:30 - 12:30</b> <b>Room: Auditorium</b>
<b>Tutorial I: Using the Cloud for Teaching and Research</b> <b>Presenter:</b> Khaled Salah, Professor, ECE Department, Khalifa University of Science, Technology and Research, UAE. <b>Time: 13:30 – 15:00</b> <b>Room: 1028</b>
<b>DIS1: Breakout Session: Communication &amp; Networks</b> <b>Session Chair: Dr. Shaza Hanif, University of Sharjah</b> <b>Time: 15:15 – 17:00</b> <b>Room: 1027</b>
<b>New Model of Emergency Communication for Disaster Relief in Remote Areas</b> Abdulrahman E. Aburawi (Malmo University, Sweden); Sarija Salic (Sweden); Magnus Krampell (Malmo University, Sweden)
<b>Random-Valued Impulse Noise Removal using Group Sparse Modeling</b> Divya Velayudhan and Salim Paul (SCT College of Engineering, India)
<b>Capacity Analysis of Amplify-and-Forward Based Dual-Hop Free Space Optical Communication System With Backup RF Link</b> Khaled Alhamawi and Essam Saleh Altubaishi (King Saud University, Saudi Arabia)
<b>Challenges and Opportunities for Underwater Sensor Networks</b> Adil A Sheikh (Umm Al-Qura University, Saudi Arabia); Emad Felemban (Umm Al Qura University, Saudi Arabia); Muhamad Felemban (Purdue, USA); Saad B. Qaisar (School of Electrical Engineering and Computer Science (SEECS), NUST & National University of Sciences & Technology, Pakistan)
<b>An Adaptive Kalman Filter based Traffic Prediction Algorithm for Urban Road Network</b>

Zeeshan Hameed Mir (Higher Colleges of Technology, UAE);  
Fethi Filali (QMIC, Qatar)

**D1S2: Breakout Session: Education & eHealth**

**Session Chair: Dr. Qusay H. Mahmoud, University of Ontario Institute of Technology**

**Time: 15:15 – 17:00**

**Room: 1028**

**User interactivity in eHealth applications: a novel taxonomy**

Muhammad Hashim (United Arab Emirates University, College of Medicine and Health Sciences, UAE)

**Capstone Project On Speech Morphing: A Highlight To Undergraduate Education On Signal Processing**

Luis Weruaga (Proactivaudio, Austria); Abdulqader Nael Mahmoud (Khalifa University, UAE);  
Raed Shubair (Khalifa University & Massachusetts Institute of Technology, UAE)

**Revolutionizing the Healthcare of the Future Through Nanomedicine: Opportunities and Challenges**

Hadeel Elayan (Khalifa University, UAE);  
Raed Shubair (Khalifa University & Massachusetts Institute of Technology, UAE); Nawaf Almoosa (Khalifa University, UAE)

**A Framework for Building Undergraduate Student Research Skills Through an Independent Engineering Study Course**

Hadeel Elayan (Khalifa University, UAE);  
Raed Shubair (Khalifa University & Massachusetts Institute of Technology, UAE); Mohamed Ibrahim AlHajri (Massachusetts Institute of Technology, UAE);  
Abdulrahman Goian (Khalifa University, UAE)

**Continuous Health Monitoring using Smartphones - A Case-Study for Monitoring Diabetic Patients in UAE**

Aravassery Jihad (United Arab Emirates University, UAE);  
Sujith Samuel Mathew (Zayed University & University of Adelaide, UAE);  
Sujni Paul (Al Dar University College, UAE)

**D1S3: Breakout Session: Circuits**

**Session Chair: Mohd Helmy Abd Wahab, Universiti Tun Hussein Onn Malaysia**

**Time: 15:15 – 17:00**

**Room: 1022**

**Modeling the Failure Probabilities of CMOS Logic Cells**

Azam Beg (United Arab Emirates University, UAE);  
Ifrah Jaffri (Habib University, Pakistan)

**Formal Specification, Refinement, and Implementation of Path Planning**

Eman Rabiah (United Arab Emirates University, UAE);  
Boumediene Belkhouche (United Arab Emirates University, UAE)

**Reconfigurable Triple Notched-Band Ultra Wideband Antenna**

Boualem Hammache (Université des Frères Mentouri, Constantine, Algeria);

Abderraouf Messai (University of Constantine 1, Algeria);  
Idris Messaoudene (Research Center in Industrial Technologies CRTI, Algeria); Mohammed Amin Meriche (INRS, Algeria);  
Massinissa Belazzoug (Université de Bordj Bou Arréridj, Algeria);  
Farouk Chetouah (Université Ferhat Abbas, Algeria)

**Miniaturized Rectangular Dielectric Resonator Antenna for WCS Standards**

Farouk Chetouah (Université Ferhat Abbas, Algeria);  
Nacerdine Bouzit (Laboratoire Instrumentation Scientifique, Algeria);  
Idris Messaoudene (Research Center in Industrial Technologies CRTI, Algeria);  
Salih Aidel (University of Bordj Bou Arreridj, Algeria);  
Massinissa Belazzoug (Université de Bordj Bou Arréridj, Algeria);  
Boualem Hammache (Université des Frères Mentouri, Constantine, Algeria)

**A Reconfigurable Cylindrical Dielectric Resonator Antenna for WiMAX/WLAN Applications**

Massinissa Belazzoug (Université de Bordj Bou Arréridj, Algeria);  
Salih Aidel (University of Bordj Bou Arreridj, Algeria);  
Idris Messaoudene (Research Center in Industrial Technologies CRTI, Algeria);  
Boualem Hammache (Université des Frères Mentouri, Constantine, Algeria);  
Farouk Chetouah (Université Ferhat Abbas, Algeria);  
Youcef Braham Chaouche (University Of Mohamed Elbachir Elibrahimi, Algeria)

**Day 2: Tuesday, November 29, 2016**

**Keynote III:** Learning, data representations, and the development of companion technology  
**Presenter:** Günther Palm, Director, Institute of Neural Information Processing University of Ulm, Germany  
**Time:** 08:00 – 09:00  
**Room:** Auditorium

**Tutorial II:** MDD + DSL = Software Development on Steroids  
**Presenter:** Maged Elaasar, Senior Software Architect, NASA Jet Propulsion Laboratory, California Institute of Technology, Pasadena, USA  
**Time:** 09:00 - 10:30  
**Room:** 1028

**D2S1: Breakout Session: Internet Applications I**  
**Session Chair:** Dr. Saad Harous, UAE University  
**Time:** 10:45 – 12:30  
**Room:** 1027

**Analysis and classification of Arabic crowd-sourced news reports: A case study of the Syrian crisis**  
Mohammad Fraiwan, Bayan Younes, Omar M Al-Jarrah and Natheer Khasawneh (Jordan University of Science and Technology, Jordan)

**Two Dimensional Filters for Enhancing the Resolution of Interpolated CT Scan Images**  
Abdulqader Nael Mahmoud and Fatma Taher (Khalifa University, UAE);  
Hussain Al-Ahmad (University of Dubai, UAE)

**Synchronous Shared Experience: Architecture for Synchronization Support**

<p>Shahab Ud Din (Higher Colleges of Technologies, Sharjah, UAE); Shaza Hanif (University of Sharjah, UAE)</p>
<p><b>iCrowd - A Framework for Monitoring of (Identifiable) Crowd</b> Sheikh Saeed (University of Management and Technology, Lahore &amp; TCMCORE Umm al Qura University, Makkah, Pakistan); Adnan Abid (University of Management and Technology, Pakistan); Ehsan Ullah Warriach (Eindhoven University of Technology, The Netherlands); Shahbaz Awan (Umm Al Qura University, Saudi Arabia); Atif Naseer (Umm Al-Qura University, Saudi Arabia); Emad Felemban (Umm Al Qura University, Saudi Arabia)</p>
<p><b>IEFP: An Application Layer Protocol for Islamic Electronic Fatawa Management and Security</b> Eyad Taqieddin (Jordan University of Science and Technology, USA); Yarub Wahsheh (Jordan University of Science and Technology, Jordan)</p>
<p><b>D2S2: Breakout Session: Security</b> <b>Session Chair: Dr. Marton Gergely, UAE University</b> <b>Time: 10:45 – 12:30</b> <b>Room: 1028</b></p>
<p><b>Secure kNN Queries over Outsourced Spatial Data for Location-based Services</b> Ayesha Talha (University of Sharjah, UAE); Ibrahim Kamel (University of Sharjah &amp; Concordia University, UAE); Zaher Al Aghbari (University of Sharjah UAE)</p>
<p><b>Watermarking for protected fingerprint authentication</b> Bousnina Naima (Mohammed V University, Rabat, Morocco); Sanaa Ghouzali (King Saud University &amp; College of Computer and Information Sciences, Saudi Arabia); Maryam Lafkih (Laboratoire de Recherche en Informatique et Télécommunication, Morocco); Ohood Almohammadi (Taibah University, Saudi Arabia); Mounia Mikram (The School of Information Sciences, Morocco); Wadood Abdul (King Saud University, Saudi Arabia); Driss Aboutajdine (CNRST &amp; LRIT Mohammed V-agdal University, Morocco)</p>
<p><b>Authentication Enhancement Techniques for BAC in 2G E-Passport</b> Nermeen Mohamed AbdAl-Ghafour (Tanta University, Egypt); Ayman A. Abdel-Hamid (Arab Academy For Science, Technology, and Maritime Transport, Egypt); Mohamed El-Said Nasr and Salah Abdel-Ghani Khamis (Faculty of Engineering, Egypt)</p>
<p><b>Architectural Design of a Cloud-based reCAPTCHA Service</b> Hanin B. Abubaker (Khalifa University of Science, Technology and Research, UAE); Khaled Salah (Khalifa University of Science, Technology and Research, UAE); Hassan Al-Muhairi (Khalifa University, UAE); Ahmed Bentiba (University of Sharjah, UAE)</p>

**Algorithm for Secure Cloud Computing Is Based On Homomorphic Encryption And Multi-Party Computation**

Debasis Das (BITS Pilani Goa Campus, India);  
Amritesh Kumar (NIIT University, India)

**Lightweight Encryption Algorithm in Wireless Body Area Network for e-Health monitoring**

Azza Alshamsi and Ezedin Barka (UAE University, UAE)

**D2S3: Breakout Session: Internet Applications II**

**Session Chair: Dr. Elfadil Abdalla Mohamed, Al Ain university of Science and Technology**

**Time: 10:45 – 12:30**

**Room: 1022**

**SADSA: Security Aware Distribution System Architecture for Smart Grid Applications**

Hosam Hittini, Atef Abdrabou, and Liren Zhang (UAE University, UAE);

**Two Dimensional Filters for Improving the Resolution of Up-Sampled Video Files**

Khalid Alzarouni, Abdulqader Nael Mahmoud, Hamza Al Maharmeh and Fatma Taher (Khalifa University, UAE);

Hussain Al-Ahmad (University of Dubai, UAE)

**Facial Features Monitoring for Real Time Drowsiness Detection**

Manu BN (Independent Researcher, India)

**Overview of Vehicle Grid Communication System and Charging Infrastructure and a Case Study of Economic and Environmental Benefits of Electric Vehicles in Nebraska**

Alan Alahmad (MIT, USA);

Ala'a Rayyan and Fares Al Juheshi (University of Nebraska-Lincoln, USA);

Khaled Shuaib (United Arab Emirates University, UAE);

Mohammed Adel Abdel-Hafez (United Arab Emirates University, UAE);

Hamid Sharif (University of Nebraska-Lincoln, USA);

Nasser Aljuhaishi (Kuwait University, USA);

Mahmoud Alahmad (University of Nebraska - Lincoln, USA)

**Integration of Heterogeneous Data Sources in Smart Grid based on Summary Schema Model**

Foroogh Sedighi (Niroo Research Institute, Iran);

Mahshid Helali Moghadam (University of Kashan, Iran)

**Tutorial III: How and Why blockchain will revolutionize the economy?**

**Presenter:** Dr. Rahma Beaugrand, Business Transformation and Innovation Principal,  
SAP Middle East and North Africa LLC

**Time:** 13:30 - 15:00

**Room:** 1027

**D2S4: Breakout Session: NLP & Text Mining**

**Session Chair: Dr. Nazar Zaki, UAE University**

**Time: 15:15 – 17:00**

**Room: 1027**

**Candidate Document Retrieval for Arabic-based Text Reuse Detection on the Web**

<p>Leena Lulu (United Arab Emirates University, UAE); Boumediene Belkhouche and Saad Harous (United Arab Emirates University, UAE)</p>
<p><b>Utilizing Long Distance Word Dependencies for Automatic Speech Recognition</b> Fawaz Al-Anzi and Dia AbuZeina (Kuwait University, Kuwait)</p>
<p><b>Analysis of Free-text Keystroke Dynamics for Arabic Language Using Euclidean Distance</b> Suliman Alsuhibany, Muna Almushyti, Noorah Alghasham and Fatimah Alkhudier (Qassim University, Saudi Arabia)</p>
<p><b>Overview of Fingerprinting Methods for Local Text Reuse Detection</b> Leena Lulu (United Arab Emirates University, UAE); Boumediene Belkhouche and Saad Harous (United Arab Emirates University, UAE)</p>
<p><b>Review of Personalized Language Learning Systems</b> Heba Ismail (United Arab Emirates University, UAE); Saad Harous and Boumediene Belkhouche (United Arab Emirates University, UAE)</p>
<p><b>D2S5: Breakout Session: IoT &amp; Social Networks</b> <b>Session Chair: Dr. Farag Sallabi, UAE University</b> <b>Time: 15:15 – 17:00</b> <b>Room: 1028</b></p>
<p><b>Social Desirability Bias in Software Piracy Research: Evidence from Pilot Studies</b> Marton Gergely (United Arab Emirates University, UAE); V. Srinivasan (Chino) Rao (The University of Texas at San Antonio, USA)</p>
<p><b>On Detecting Communities in Social Networks with Interests</b> Mohammed Ba Hutair and Zaher Al Aghbari (University of Sharjah, UAE); Ibrahim Kamel (University of Sharjah &amp; Concordia University, UAE)</p>
<p><b>Internet of Things: Applications and Challenges</b> Khaled Al Rabaiei and Saad Harous (United Arab Emirates University, UAE)</p>
<p><b>Social Information Sharing and Friend Recommendation in Online Social Games</b> Alessandro Vizzarri (University of Rome Tor Vergata, Italy); Fabrizio Davide (University Guglielmo Marconi, Italy)</p>
<p><b>From the Internet of Things to The Web of Things - Enabling by Sensing as-a Service</b> Sujith Samuel Mathew (Zayed University &amp; University of Adelaide, UAE); Yacine Atif (University of Skovde, Sweden); May El Barachi (Zayed University, United Arab Emirates (UAE))</p>
<p><b>D2S6: Breakout Session: Data Mining &amp; Analytics</b> <b>Session Chair: Dr. Sami Shaban, UAE University</b> <b>Time: 15:15 – 17:00</b> <b>Room: 1022</b></p>
<p><b>Identifying Roles of Fishing Ports using Multi-source Data Aggregation</b> William W.Y. Hsu (National Taiwan Ocean University); Hao-Hsun Wang, Min-Ruey You, Min-Hsuan Lu and Hsin-Yu Tsai (National Taiwan Ocean University, Taiwan)</p>



**Semantic enterprise service bus for cultural heritage**

Antonio Capodieci and Luca Mainetti (University of Salento, Italy);

Sergio Carrozzo (Università del Salento, Italy)

**The Use of Data Mining Techniques to Predict Mortality and Length of Stay in an ICU**

Alramzana Nujum Navaz (United Arab Emirates University, UAE);

Elfadil Mohammed (Al Ain University of Science and Technology, UAE);

Mohamed Adel Serhani and Nazar Zaki (United Arab Emirates University, UAE)

**Ensemble Classification of Cyber Space Users Tendency in Blog Writing using Random Forest**

Noor Azah Samsudin (Universiti Tun Hussein Onn Malaysia, Malaysia);

Aida Mustapha (Faculty of Computer Science and Information Technology, Universiti Tun Hussein Onn Malaysia, Malaysia);

Mohd Helmy Abd Wahab (Universiti Tun Hussein Onn Malaysia, Malaysia)

**Data Mining Techniques to Predict the Ranking of E- Government Services**

Nayla Alkhatri (United Arab Emirates University, UAE),

Nazar Zaki (United Arab Emirates University, UAE),

Elfadil Mohammed (Al Ain University of Science and Technology (UAE)),

Musa Shallal (United Arab Emirates University, UAE)