



4<sup>TH</sup>  
THE ANNUAL  
UNDERGRADUATE  
RESEARCH  
CONFERENCE  
ON APPLIED COMPUTING  
(URC 2012)

PRESENT | CONNECT | COLLABORATE

## PROGRAM OVERVIEW

APRIL 18 - 19, 2012

COLLEGE OF INFORMATION TECHNOLOGY  
ZAYED UNIVERSITY, DUBAI CAMPUS  
UNITED ARAB EMIRATES





**His Excellency Sheikh Nahayan Mubarak Al Nahayan**

Minister of Higher Education and Scientific Research  
President of Zayed University



**Dr. Sulaiman Al Jassim**

Vice President, Zayed University



**Dr. Larry Wilson**

Provost, Zayed University



## Wednesday, April 18

8:00am – 9:00am	<b>Registration</b> Continental Breakfast and Poster Setup
9:00am -9:30am	<b>Welcome</b>
9:30am - 10:30am	<b>Keynote: Dr. Eesa Bastaki</b> CEO, ICT Fund
10:30am – 11:00am	<b>Coffee Break</b>
11:00am – 12:00pm	<b>Poster and Oral Presentations</b> (5 Parallel Sessions), see the detailed program for room numbers
12:00pm - 1:30pm	<b>Lunch</b>
1:30pm - 2:30pm	<b>Keynote: Dr. Abdellatif Saoudi</b> Managing Director, Qatar Computing Research Institute
2:30pm - 3:30pm	<b>Poster and Oral Presentations</b> (5 Parallel Sessions), see the detailed program for room numbers
3:30pm – 4:00pm	<b>Coffee Break</b>
4:00pm – 5:00pm	<b>Panel: Opportunities and Challenges for Research in the Region</b> <b>Moderator:</b> Dr. Leon Jololian (Zayed University) <b>Panel Members:</b> Sara Sharaf (ATIC) Dr. Eyad H. Abed (UAE University) Dr. Zakaria Maamar (Zayed University) Colonel Stanislas de Maupeou (Thales)

## Thursday, April 19

8:00am - 9:30am	<b>Registration</b> Continental Breakfast and Poster Setup
9:30am - 10:00am	<b>Keynote: Dr. Michael Allen</b> Assistant Provost for Faculty Affairs and Research, Zayed University
10:00am - 10:30am	<b>Open Forum</b>
10:30am- 11:00am	<b>Coffee Break</b>
11:00am - 12:00pm	<b>Poster and Oral Presentations</b> (5 Parallel Sessions), see the detailed program for room numbers
12:00pm - 1:30pm	<b>Lunch</b>
1:30pm – 2:30pm	<b>Keynote: Suad Al Shamsi</b> Research and Development Manager, emaratech
2:30pm - 3:30pm	<b>Poster and Oral Presentations</b> (5 Parallel Sessions), see the detailed program for room numbers
3:30pm- 4:00pm	<b>Coffee Break</b>
4:00pm - 4:30pm	<b>Awards and Closing Remarks</b>

UNDERGRADUATE  
**RESEARCH  
CONFERENCE**  
PRESENT | CONNECT | COLLABORATE





UNDERGRADUATE  
RESEARCH  
CONFERENCE

PRESENT | CONNECT | COLLABORATE

# *Keynote* Speakers



## Eesa Mohammed Bastaki, Ph.D.

Dr. Eesa Bastaki is the CEO of the ICT Fund and is actively leading the effort to create an eco-system in the UAE ICT industry, by encouraging entrepreneurship, funding R&D projects and University scholarships and implementing ICT initiatives at the school level. In the personal basis Dr. Bastaki was born in Dubai, UAE. As a UAE national scientist and researcher he studied abroad where he received his B.Sc. and M.Sc. degrees in Electrical Engineering from University of California, San Diego and Ph.D. from University of California, Irvine. His research interests are Multiple Access Communications, Coding and Synchronization. He is a faculty member in the Electrical Engineering Department at UAE University since 1989. During his career he held many posts. He was the Chairman of the Energy Section and later the Technology Section during 1990-1992 at UAEU. At UAEU, he was the Assistant Dean for Student Affairs in 1992-1996 and the Director of the IT Center in 1998-2000. In 2000 he founded the IT Center at Al-Ain Municipality. He was Consultant and Director of Education & Technology from 2003 to 2008 and one of the founders of Dubai Silicon Oasis Authority. He was Consultant and one of the founders of Rochester Institute of Technology-Dubai. Now, he is the CEO of ICT Fund, Chairman and Partner of Barajeel Engineering Consultants, Chairman of Emirates Science Club, Board Member of Cultural & Science Association. He is also the Chairman of IEEE, UAE Section and member of Society of Engineers. He is a member of Advisory Board of 6 universities. He is the recipient of Sheikh Rashid's Award for Scientific Excellence. In 2009, he received UAE's highest award "The Emirates Awards for Science, Arts and Literature" in sciences.

UNDERGRADUATE  
RESEARCH  
CONFERENCE

PRESENT | CONNECT | COLLABORATE





## **Abdellatif Saoudi, Ph.D.**

Dr. Abdellatif Saoudi is the Managing Director of the Qatar Computing Research Institute. He received his PhD in Computer Science from Nantes University (France) in 1997 and his MSc from INSA de Lyon (France). He has served on the faculties of Polytechnic Institute of Nantes and Nantes University. The author of several industrial and scientific papers, he is interested in internet computing, data analytics, and knowledge management. Dr. Saoudi also served as Head Corporate Solutions in Qatar Petroleum (Qatar) where he managed large-scale ICT projects' portfolio as well as leading major initiatives related to Web Technologies, Enterprise Content Management (ECM) and GIS. He has worked as an IT expert for Islamic Development Bank (International Financial Institution) in Jeddah, Saudi Arabia, where he played a key role in leading the strategic banking solutions. In 2008, he received the GIS Special Achievement Award from ESRI (Environmental Systems Research Institute) in San Diego (California).





## Michael Allen, Ph.D.

Dr. Michael Allen is Assistant Provost for Faculty Affairs and Research at Zayed University, having previously served for five years as Dean of the College of Arts and Sciences. He has also held positions at the University of Auckland (New Zealand), the University of California at Berkeley, Brigham Young University, and the University of Victoria (British Columbia, Canada). He has extensive experience in international education, and has traveled widely both for his own research and to build programs and partnerships between universities. Trained as a historian, Dr. Allen received his Ph.D. degree from the University of Washington and his Master's degree from the University of California at Berkeley. He holds undergraduate degrees in both History and Asian Studies from Brigham Young University. Dr. Allen is a specialist on East Asian history in the 19<sup>th</sup> and early 20<sup>th</sup> centuries, and has traveled numerous times to China, Japan, and Korea (both North and South). Most of his research has focused on Korea in the 19<sup>th</sup> and 20<sup>th</sup> centuries. He also has a deep interest in world history, and his publications include books and articles on nationalism in East Asia, intellectual history, historiography, and the history of the world since 1500.

UNDERGRADUATE  
**RESEARCH  
CONFERENCE**  
PRESENT | CONNECT | COLLABORATE





## Suad Al Shamsi, MSc

Suad Al Shamsi is a Research and Development (R&D) Manager at emaratech, leading IT company in Dubai. Suad has an extensive technical knowledge in various areas such as mobile computing, semantic web, speech recognition, business process modeling, SOA, web service. As an R&D Manager, Suad is responsible for empowering the organization with innovative products based on the current technological trends and business demands. Suad holds an MSc with honors in Informatics from British University in Dubai (BUiD) and B.S. with honors in Information Systems from Zayed University (ZU), UAE.

UNDERGRADUATE  
RESEARCH  
CONFERENCE

PRESENT | CONNECT | COLLABORATE

# *Panel*

## Members

### **Panel Description**

The region is emerging as a hub for education and universities are striving to enhance their research portfolios and establish rewarding industry academia collaborations. This panel will address and discuss the research opportunities and challenges faced by academics interested in establishing research programs, and explore some possible solutions and successful research models. Distinguished members of this panel will explore answers to questions, such as: (1) why do research and what incentives exist for publishing? (2) what does it take to transform a teaching university into a research emerging university? and (3) what are some of the available sources of research funding in the region? (4) how to foster collaboration between industry and academia? plus other related questions from the audience.

UNDERGRADUATE  
RESEARCH  
CONFERENCE

PRESENT | CONNECT | COLLABORATE





## Leon Jololian, Ph.D.

Dr. Leon Jololian is the Dean of the College of IT since January 2009. Prior to his current position, he was the Acting Dean (2007-2008) and the Assistant Dean (2006-2007) of the College of IT at Zayed University. Dr. Jololian earned his Ph.D. (2000) in Computer Science from New Jersey Institute of Technology, in Newark, New Jersey, a Masters in Computer Science (1991) from Polytechnic University, in Brooklyn, New York, a masters degree in Electrical Engineering (1982) from Georgia Institute of Technology, in Atlanta, Georgia, and a Bachelors degree in Electrical Engineering (1980), from Manhattan College, in Riverdale, New York. Dr. Jololian has held faculty positions at William Paterson University, University of Alabama at Birmingham, and New Jersey City University (tenured faculty). He has also held the positions of Director of Computing at New Jersey Institute of Technology and Vice President for Research and Development at Thor Technologies in New York. Dr. Jololian's research interests include software component architecture and object-oriented technology.

## Sara Sharaf, ScM

Sara Sharaf is a Senior Associate leading microelectronics Research and Development (R&D) programs across UAE universities for the Advanced Technology Investment Company (ATIC), a Mubadala Company. Sara has extensive experience developing and managing R&D programs for Abu Dhabi & Dubai governments across a range of disciplines, including alternative energy, environment and semiconductor technologies. Sara represents ATIC on a global semiconductor board and several local university-industry steering committees. Sara is a WEF Global Shaper and holds both the ScB in Chemical & Biochemical Engineering and the ScM in Innovation Management & Entrepreneurship from Brown University, USA.



## **Eyad H. Abed, Ph.D.**

Dr. Eyad H. Abed received the S.B. degree from the Massachusetts Institute of Technology in 1979, and the M.S. and Ph.D. degrees in 1981 and 1982, respectively, from the University of California at Berkeley, all in Electrical Engineering. Since September 2009, he has been Dean of the Faculty of Information Technology at United Arab Emirates University in Al Ain. Prior to joining the UAE University, he was with the Department of Electrical and Computer Engineering at the University of Maryland, College Park, where he was Professor and Director of the Institute for Systems Research. Dr. Abed's research interests include system and control theory; nonlinear dynamics and control; electric power system dynamics and control; aerospace control systems; and the analysis and design of complex networks, including communication networks and social networks. Dr. Abed, a Fellow of the IEEE, is a recipient of the Presidential Young Investigator Award, the O. Hugo Schuck Best Paper Award, a Senior Fulbright Scholar Award, the Alan Berman Research Publication Award, and several awards from the University of Maryland. He has been on the editorial boards of the IEEE Transactions on Automatic Control and the journal Nonlinear Dynamics. He was also a member of the Executive Committee of the IEEE Control Systems Society, serving as Vice President for Financial Activities of the Society from 2007-2009.

UNDERGRADUATE  
**RESEARCH  
CONFERENCE**  
PRESENT | CONNECT | COLLABORATE





## **Zakaria Maamar, Ph.D.**

Dr Zakaria Maamar is a Professor in the College of Information Technology at Zayed University in Dubai. His research interests are primarily related to service sciences theories and methods, context-aware computing, and enterprise application interoperability. Dr. Maamar has published several peer-reviewed papers in journals and conferences, is the founder of the International Annual Symposium on Web Services ([www.zu.ac.ae/wss](http://www.zu.ac.ae/wss)), and regularly serves on the program and organizing committees of several international conferences and workshops. He graduated for his Ph.D. in Computer Sciences from Laval University in Canada in 1998.



## **Stanislas de Maupeou**

Colonel Stanislas de Maupeou is responsible for cyber-defense at the electronic systems company Thales. He was formerly head of the government center for responding to cyber-attacks (CERTA), part of the defense and national security secretariat (SGDSN), and a marine infantry officer. He is an expert on information assurance. Stanislas de Maupeou has published articles, notably on Internet security and risk analysis. He has taught at ENSTA ([www.ensta.fr](http://www.ensta.fr)) and at ESIEA ([www.esiea.fr](http://www.esiea.fr)).

## **URC 2012 ORGANIZING COMMITTEE**

Unless otherwise noted, all organizers are with the  
College of Information Technology, Zayed University, UAE.

### **Conference Co-Chairs**

Qusay H. Mahmoud, University of Guelph (Canada)  
Leon Jololian

### **Program Co-Chairs**

Zakaria Maamar  
Emad Bataineh

### **Publications Chair**

Qusay H. Mahmoud, University of Guelph (Canada)

### **External Relations Chair**

Mario Guimaraes

### **Publicity Co-Chairs**

Huwida Said  
Omar AlFandi

### **Registration Chair**

Mona Bader

### **Awards Co-Chairs**

Emilia Mendes  
Andrew Marrington

### **Local Arrangements Co-Chairs**

Huwida Said  
Hind AlDosari  
Nagaraj Chandrashekan  
Arwa AlNauimi  
Izzeddin Asad



جامعة زايد  
ZAYED UNIVERSITY



<http://www.urc.ac>