كلية الهندسة
College of Engineering
جامعة قطر QATAR UNIVERSITY

EE SEMINAR SERIES

The Department of Electrical Engineering, cordially invites you to a seminar on

Internet of Things: Opportunities and Future Challenges for Policy and Economic Development

By

Dr. Hosein Badran

Date: Wednesday Nov. 6, 2013
Time: 11:00 am - 12:00 pm
Venue: BCR-I210(Corridor 9)

Speaker's Bio:

Dr. Hosein Badran is an internationally recognized senior telecommunications expert with broad experience in telecommunications networks technologies, mobile and fixed IP NGN architectures and services, cloud-based architectures and services, IoT and machine-to-machine communications, Internet Governance, Technology Policy, Internet Safety, and ICT for Development.

During his carrier spanning over 25 years, he has accumulated wide international experience by having worked in North America (Canada, US), Latin America (Brazil, Argentina), Europe (e.g. Germany, France), APAC (Australia and Singapore), and of course in the Middle East and Africa.

Dr. Badran spent the last 14 years with Cisco Systems International, and has been selected by Cisco worldwide technical executive evaluation committee to become first Cisco Distinguished Systems Architect based in Emerging Markets. He is also first Cisco Chief Technology Officer for MENA reporting to the Office of the CTO. As a Regional CTO, Dr. Badran has been closely engaged with major operators on the deployment of new IP NGN technologies, as well as with government agencies, telecom regulators and ministries for the promotion of new ICT-related country transformation initiatives.

He achieved highest awards in Cisco Sales organization, having received the Chairman's Club Award for technical excellence, new technology adoption, and sales impact as well as multi-vertical and regional collaboration.

Dr. Badran serves on the board of directors of the Egyptian National Telecommunications Institute (NTI), Board of Trustees of the Institute of Information Technology (ITI), both headed by the Minister of CIT, the Board of Directors of the Internet Society Egypt Chapter (ISOC-EG), and is a Founding Board Member of the Fiber to The Home (FTTH) MENA Council, and Chair Policy and Regulatory committee. He serves also as a member of the Ministerial National Working Group on e-Commerce, and had been selected to serve on the Steering Committee of the Dynamic Coalition on the Internet of Things (IoT).

Dr. Badran is a member of the Multi-stakeholder Advisory Group (A-MAG) of the Arab region Internet Governance Forum (A-IGF). He served as a member of the ICAAN first Support Applicant Review Panel (SARP), which reviews support requests for applications for new gTLDs. He was the official Cisco representative to the ITU Council Working Group on Child Online Protection (CWG-CP).

Dr. Badran was an invited member of the official delegation of the Egyptian government to the United Nations ITU World Conference on International Telecommunication (ITU-WCIT) in Dubai, Dec 2012, tasked with the update of the ITRs (International Telecommunications Regulations), representing Civil Society, particularly Internet Egypt/ISOC-EG.

Dr. Badran was a member of the Global Innovation through Science and Technology (GIST) Initiative, invited to participate as a private sector expert in the Leadership Circle working group. GIST is one of the primary science and technology initiatives arising from U.S. President Barack Obama's June 2009 "New Beginnings" speech in Cairo, Egypt. The vision for GIST is to improve economic prosperity through sustainable technology-based innovation in the Middle East, North Africa (MENA) and Asia regions. Specific recommendations and business plan competition were developed to catalyze innovation across sectors, including agriculture, energy, health and information and communication technology.

Dr. Badran was lead architect for the Partnership for Lebanon (PfL) Initiative sponsored by the Government of Lebanon and Cisco CEO John Chambers, as well as Microsoft and Intel from the private sector. He was key contributor in the United Nations Conference on Trade and Development (UNCTAD) ICT Policy Review for Egypt 2011, and representative of the private sector at the announcement ceremony of the report at the UNCTAD headquarter in Geneva.

Dr. Badran holds a PhD in ATM Networks from Queen's University in Canada (1994), MSc in Teletraffic Engineering from Cairo University in Egypt (1987), and B.Sc. (Highest Honors) in Electronics and Communications Engineering from Cairo University (1985). He held teaching positions at both Cairo and Queen's universities. Dr. Badran has been a Senior Member of the IEEE since 1998. He is a Cisco WiMAX Ambassador and an International ATM Forum Ambassador.

Before joining Cisco, he was with Nortel Networks in Ottawa, Canada, as a member of the Magellan Passport development team on traffic engineering algorithms, then with the International Network Engineering team on the development of the network engineering guidelines for multi-service networks with major operators worldwide. He then worked for FORE Systems in Dubai as a Senior Consulting Engineer covering the Middle East region. He also worked in different capacities at Siemens AG in Munich, Germany, and at Ecole Nationale Superieure des Telecommunications (ENST) in Paris, France.

Abstract

The Internet of Things (IoT) is a technology paradigm with a highly promising impact on the economic sector for sustainability, growth, innovation and employment. At the same time, IoT social impacts will present new challenges to public policy issues particularly privacy, security and free flow of information. It is closely linked to the development of new Internet applications, the mobile Internet and cloud computing. The presentation will discuss how the future development of IoT can become an engine for growth and development, in particular in developing countries where mobile communication has allowed leapfrogging in selected areas of the emerging Internet economy. At the same time, countries with developing economies face critical challenges that can be addressed using solutions based on machine-to-machine (M2M) communications and smart technology solutions. Examples of such applications will be presented. Key sectors to be examined will be transportation, health, energy distribution and consumption, agriculture and smart arrogation, with focus Egypt and other emerging economies.