A Week on Cloud and Scalability

Please note that all seminars will take place at CAMS seminar room, 4th Floor, College Hall.

Monday November 25, 2013
1:00 pm talk
*Energy Efficient Computing*, by Dr. Rabih Bashroush

Abstract: Information Technology activity has entered a new era. According to a recent publication by Cisco, by the end of 2011, 20 typical households would generate more traffic than the entire Internet in 2008. Currently, IT systems consume 6% of the UK's national power grid and it is predicted that the Internet will consume all of Japan's energy production by 2030. This talk will provide a snapshot of the state-of-the-art on Energy Efficiency research highlighting some of the challenges being addressed through mathematical modeling.

4:00 pm talk
*Monetizing your skills: Landing the dream job*, by Microsoft Senior Lead Manager Moustafa Noureddine.

Abstract: Landing the dream job requires a combination of technical and non-technical skills and most importantly networking assets. In this talk, current trends in hiring for large organizations such as Microsoft are presented. A sample of the latest interviewing questions and the competencies assessed during interviews are also discussed.

Tuesday November 26, 2013
1:00 pm talk
*Developing Large Scale Enterprise Applications in the Cloud*, by Microsoft Senior Lead Manager Moustafa Noureddine.

Abstract: The cloud trend is becoming ubiquitous for software organizations. The ones openly embrace the cloud have no choice but to architect solutions provided by multiple cloud offerings requiring inter-cloud identity federation, performance optimization, and in most cases, private-cloud to public-cloud hybrid composition. This hybrid model tends to be complex to setup and needs to guarantee service level agreements are met. These variations make the business intelligence data model very large and complex, requiring big-data mathematical analysis and machine learning to make decisions and identify trends. In this talk, we address these issues and present a case study conducted at Microsoft to illustrate how big organizations are dealing with these challenges.

4:00 pm talk
*Overview of EU Research Funding Opportunities*, by Dr. Rabih Bashroush

Abstract: The European Commission has just released details of its Horizon 2020 programme, the EU Framework Programme for Research and Innovation running from 2014 to 2020 with a budget of over 70 Billion Euros. The programme is to fund projects undertaking research, coordination and demonstration activities by partners from EU states and beyond. This talk will provide an overview of the H2020 programme and the funding opportunities available for participants from outside the EU.
Wednesday November 27, 2013
1:00 pm talk
Scaling Variability Management in Software Product Lines, by Dr. Rabih Bashroush.

Abstract: Software Product Line Engineering (SPLE) has emerged in recent years as a viable way to maximize reuse when designing a family of related products. One of the main tasks conducted during the SPLE process is Variability Management (VM). VM is about identifying commonality among the different products being developed while capturing and cataloging variability. In real life projects, VM models tend to encompass a very large number of variants reaching in many projects the order of thousands. Validating and visualizing these models has been a major challenge. In this talk, an overview of SPLE and VM is provided along with mathematical approaches being used to address the scalability challenges.

Bios

Moustafa Noureddine is a Senior Lead Program Manager in Skype division at Microsoft Corporation, Redmond, USA. Before joining Microsoft in 2008, Moustafa worked at a number of blue-chip industries such as Mentor Graphics and Router Solutions Incorporated. Moustafa has an MBA from Pepperdine University, an MSc and a BSc in Computer Science from California State University, Fullerton, and final year Ph.D. candidate at the University of East London where he published in various journals and conferences on the topic of Cloud Security and Performance.

Rabih Bashroush is a Senior Lecturer in Software Engineering at the University of East London (UEL) where he also leads the Software Architecture Research Group (SOAR). Before that, Rabih was a Senior Engineer at the ECIT institute and held a lectureship position at the Queens University of Belfast. Rabih held a number of visiting scientist posts at a number of institutes including: the Software Engineering Institute, SEI, Carnegie Mellon University, USA; Danfoss Power Electronics, Denmark; and Philips Research Labs, Netherlands. He is a Fellow of the UK Higher Education Academy; Board member of IasaUK; Accreditation Board member of the Data Centre Alliance; and Honorary member of the Korea Information Processing Society.