RAISE'14 PROGRAM
June 03, 2014, Hyderabad, India

09:00-09:15	Welcome from the Chairs
09:15-10:30	Keynote: Nazim H. Madhavji: "Impediments to Regulatory Compliance of Requirements RAISEs some challenges to SE and AI"
10:30-11:00	Coffee Break
11:00-12:30 Chair: Leandro Minku	**AI for SE: Software Quality Assurance** • (30 min) Falk Langer and Erik Oswald. A self-learning approach for validation of communication in embedded systems • (30 min) Ayushi Aggarwal, Gajendra Waghmare and Ashish Sureka. Mining Issue Tracking Systems Using Topic Models for Trend Analysis, Corpus Exploration and Understanding Evolution • (30 min) Ayse Tosun Misirli and Ayse Basar Bener. A Mapping Study on Bayesian Networks for Software Quality Prediction
12:30-14:00	Lunch
14:00-15:30 Chair: Ayse Tosun Misirli	**AI for SE: Natural Language Processing** • (30 min) Ritika Jain, Smita Ghaisas and Ashish Sureka. SANAYOJAN: A Framework for Traceability Link Recovery between Use-Cases in Software Requirement Specification and Regulatory Documents • (30 min) Imran Sarwar Bajwa, Behzad Bordbar and Mark Lee. OCL Usability: A major Challenge in Adopting UML • (30 min) Mathias Landhäußer, Tobias Hey and Walter Tichy. Deriving Timelines From Texts
15:30-16:00	Coffee Break
16:00-17:30 Chair: Tim Menzies	**AI for SE: Requirements, Comprehension and Traceability** • (30 min) Richa Sharma, Jaspreet Bhatia and K.K. Biswas. Machine Learning for Constituency Test of Coordinating Conjunctions in Requirements Specifications • (30 min) Naveen Kulkarni and Vasudeva Varma. Supporting Comprehension of Unfamiliar Programs by Modeling an Expert's Perception • (30 min) Jane Cleland-Huang and Jin Guo. Towards More Intelligent Trace Retrieval Algorithms

Impediments to Regulatory Compliance of Requirements RAISEs some challenges to SE and AI

Nazim H. Madhavji

It is a given that large-scale contractual systems engineering projects need to comply with a myriad of government regulations and standards as part of contractual fulfillment. Thus, a key activity in the requirements engineering (RE) process for such a project is to demonstrate that all relevant requirements have been elicited from the regulatory documents and have been traced to the contract as well as to the target system components. However, there are impediments to achieving this level of compliance due to such complexity factors as: voluminous contract, large number of regulatory documents, multiple domains of the system, and others. In this talk, I will describe hitherto uncovered impediments in qualitative and quantitative terms, identified from the study of a large systems engineering project. I shall portray these as challenges raised to SE/AI technological effort to automate compliance work in system development.

BIOGRAPHY

Nazim H. Madhavji is Professor in the Department of Computer Science at the University of Western Ontario, Canada. He is particularly known for his contributions to the theory on interactions between system requirements and architectures, and for his work on: the impediments to regulatory compliance in large projects, evolution of systems, software quality, defect analysis, congruence between software products and processes, and empirical studies. He has led a number of projects, involving corporations such as IBM Canada, Sun Microsystems, DMR Group, CAE Electronics, Transport Canada, Siemens, SIG, and CRIM, and was a Principal Investigator in several multi-university projects. He has served on the Editorial Boards of several scientific journals, has published widely in scientific conferences and journals, and his papers have been ranked among the best papers of conferences. He is a consultant to several organisations in the field of software and to several universities internationally in the areas of Software Engineering research, pedagogy, and student and faculty development.