

## Invited Keynote Speakers

Dr. Carlos Ferraz

Assistant Professor of the Informatics Center at the Federal University of Pernambuco

First Coordinator for Recife BEAT (Base for High Tech Enterprises)

Assistant Director (Vice-President) of C.E.S.A.R. Next Generation Games

The talk on Next Generation Games will start with a historical overview of electronic games, categorizing them according to the devices used, from console games to PC or mobile phones games. Today and tomorrow's games are strongly characterized by diversity in many ways: graphics, audio, performance, number of users and of processors or computers involved, display sizes etc. For next generation games, high degrees of convergence and pervasiveness, considering different networks (including sensors), platforms and media, are expected and "virtuality" will finally meet reality, integrating arts, culture, science and technology, and involving professionals like humanists, artists, sportsmen, scientists, among others. Very soon, game developers will have to deal with the integration of many different devices, with very different computing power and very different other resources; the challenge will be: what to do with all this? biography soon

Assistant Director (Vice-President) of C.E.S.A.R, Carlos Ferraz also serves as an Assistant Professor for the Informatics Centre at the Federal University of Pernambuco. He earned his PhD in Computer Science from the University of Kent at Canterbury in England; and has over 70 articles published in journals and magazines, along with national and international scientific conferences. He was the first Coordinator for Recife BEAT (Base for High Tech Enterprises); responsible for organizing projects involving large numbers of institutions. Ferraz has various fields of interest including Distributed Systems (DS), Software Engineering for DSs, Ubiquitous and Pervasive Computing, Middleware, and Software for Digital TV (Middleware and Applications).

Dr. Torsten Braun

Full Professor of Computer Science at the University of Bern, Switzerland Senior consultant at the IBM European Networking Center, Heidelberg, Germany Board member of SWITCH (Swiss Education and Research network) Energy-efficient protocols for wireless sensor networks Energy-efficiency is the main concern in wireless sensor networks, which are based on wireless multi-hop communication. The talk emphasizes the need for energy saving mechanisms at various protocol layers. In particular, cross-layer approaches are needed. We will discuss approaches to reduce the energy consumption of sensor nodes by proper design of communication protocols on transport and medium access control level. Examples include a scheme to reduce TCP segment transmissions in wireless sensor networks and experiments of medium access control protocols on real sensor nodes.

.biography

Torsten Braun got his diploma and Ph.D. degrees from the University of Karlsruhe, Germany, in 1990 and 1993, respectively. From 1994 to 1995 he was a guest scientist with INRIA Sophia Antipolis. From 1995 to 1997 he worked as a project leader and senior consultant at the IBM European Networking Center, Heidelberg, Germany. Since 1998 he has been a full professor of computer science at the Institute of Computer Science and Applied Mathematics of University of Bern in Switzerland heading the Computer Networks and Distributed Systems research group. He has been a board member of SWITCH (Swiss Education and Research network) since 2000. During his sabbatical in 2004, he has been visiting scientist at INRIA Sophia-Antipolis and the Swedish Institute of Computer Science at Kista.

Dr. José Tribolet

Full Professor of the Computer Engineering Department at the IST

MIT fellow of Sloan School of Management

CEO of INESC

Organizational Design and Engineering to handle the complexity of Reality, in Real-Time! Organizations are complex, dynamic systems. At any given moment, an organization is the result of the many interactions among its active components, which in turn affect the internal states of all and every such organizational components. The static and the dynamic behavior of an organization is thus the resultant of these interactions along time. None of this is news to the engineering world. Through modern science, mankind has learned to conceive, design, develop, build, operate and maintain very complex systems indeed, from spacecrafts to deep sea ships, from nuclear power stations to nano-robots for human surgery, from bio-devices to intelligent toys. It is time to pull together the vast amounts of know-how accumulated by mankind, in the social sciences and in the real-world of managerial experience, with the intellectual capital accumulated in the hard sciences and the real-world transformations induced by the ICT instrumentations of modern human environment. Dealing with Complex Dynamic Systems through "old-time common good sense" is simply "non-sense", in today's chaotic world. Enabling real-time "dynamic flight control" of a complex organization requires sound organizational engineering and real time monitoring and control of all the human and machine active elements that "are" the organization. Taking good note however that humans are not machines, they have free will, and therefore the "dynamic controls required" are not of the mechanic, deterministic type, but rather of the biologic, intelligent- agents style.

Just like an Orchestra.biography

Dr. Tribolet holds a Ph.D. in Electrical Engineering and Computer Science from MIT (1977). He is a founding member of the Portuguese Academy of Engineering. He founded and is the President and CEO of INESC, Institute for Systems and Computer Engineering, a private sector, contract-based research organization, owned in equal parts by academic institutions and businesses, one of the leading R&D institutions in IT&T in Portugal.

As Visiting Fellow, at MIT's Sloan School of Management, in 1997-1998, he begun developing his current interest in Enterprise Architectures, Organizational Engineering, Business Process Modelling and Information Systems Architectures.

Upon his return from sabbatical leave, Dr. Tribolet founded a new research center – CEO – Centro de Engenharia Organizacional - (Center for Organizational Engineering), at INESC – INOV, where 12 Master of Science thesis have been completed so far. Presently, 8 Ph. D., 5 Ms. SC students and 16 Undergraduate thesis students are working at CEO, resulting in 60 scientific publications from 1999 through July 2006.

Dr. Tribolet has initiated a new track on "Organizational Engineering" at ACM's SAC Conferences. He chaired the track in 2004, 2005, 2006 and will again chair it in 2007, in association with Prof. Robert Winter, from St. Gallen University, in Switzerland. He will chair, with Prof. Jan Dietz, from Delft Technical University, Netherlands, the novel track on Enterprise Engineering, at the 2007 European Information Systems Conference.

In terms of pedagogical activities, Dr. Tribolet has designed and leads the novel "Enterprise Information Systems" profile of the Master of Science Curriculum in Computer Engineering and Information Systems, at ITS/UTL. Under his guidance, since 1999, 8 brand new courses have been developed and are now part of the normal school's curriculum, 2 of which at A level.

Dr. Tribolet maintains an active professional profile, personally advising top executives on matters involving Business Information Systems, covering governance, strategy, architecture, alignment, change and knowledge management aspects, so as to enable more informed, independent and focused decisions by his clients. Among his clients are/were PORTUCEL-SOPORCEL Group (Pulp and Paper Conglomerate), JERÓNIMO MARTINS SA (Hyper and Super Market Retail Chain), MOVIFLOR SA (Home Furniture), AdP - Águas de Portugal, SGPS SA (Holding Group, with interests in Water, Garbage and Sewage). GRUPO SÁ (Hyper and Super Market Retail Chain, HUC - Hospitais Universitários de Coimbra and INATEL (Hotels, Tourism, Sports).