

Spring 2005 ETCS Colloquium Series

Monday, February 28, 2005
12:00 – 1:15 PM
KT 118

ALL FACULTY, STAFF, STUDENTS AND COMMUNITY INDIVIDUALS ARE INVITED.



Networking Simulations

by

Ms. Carmen Boje

Abstract

Artifex, a simulation tool for discrete event system modeling, based on Extended Petri Networks and C/C++ code embedded within the elements of a network, will be presented. The Artifex examples provide simulation and analysis of communication protocols (e.g. TCP/IP, MPLS) and performance evaluation of distributed traffic descriptions, discrete events and management techniques, enabling rapid prototyping. Artifex provides a detailed graphical view of equipment and network behavior and performance where the concepts of timing, structures and functionality are critical.

Simulations made by using OPNET (networking software tool) will also be covered. A study of the Common Channel Signaling (CCS#7) network simulations (ITU-T and Italian case) confirmed the results of the theoretic study on critical areas of research in congestion propagation; the theoretical values chosen in the national case demonstrated a faster reaction time in order to eliminate data/message congestion.

Biography

Carmen Boje is a Visiting Assistant Professor at IPFW. She teaches various engineering related courses in the Electrical and Computer Engineering Technology department. She received her M.S. in Electronic Engineering in 1997, another M.S. was received in Computer Networks and Multimedia Applications in 1998 (both from Polytechnic University of Turin, Italy). Her first M. S. in Electronics and Telecommunications Engineering was earned in 1985 from the Polytechnic University of Bucharest, Romania.

Her professional experience includes appointments as an Assistant Professor in the Department of Computer and Information Technology at IUPUI (2001-2004). She served as a Software Validation Engineer and Technical Writer at ARTIS Software Corporation (now RSoft, USA) in Turin, Italy (1997-2001), Carmen was an Instructor at the European Center for University Training and "Radio-Elettra" Studies Center (1995-2001). She also worked in international business helping to establish Italian-Romanian joint ventures from 1992-1995.

Pizza and drinks will be furnished, compliments of Dean Voland.

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