UCF Stands For Opportunity

Presents the Fall 2012 EECS Seminar Series
Dr. Joel M. Crichlow
Rowan University

"Combining Optimism and Pessimism in Accessing Replicas of Countable Objects in Distributed Systems"
Monday, October 1, 2012 • 2:00 p.m. • HEC 101

ABSTRACT

COPAR (Combining Optimism and Pessimism in Accessing Replicas) is a novel distributed transaction processing system that manages updates to a database that is replicated at a number of servers. The database maintains a count of available resources that can be allocated, deallocated and replenished. The servers may be connected by a high-latency, low-bandwidth, or congested network. One area in which COPAR could be applicable is in the distribution of relief supplies in a large-scale disaster situation. This presentation describes how COPAR can be used to facilitate the speedy distribution of supplies via a network of servers and client machines. Currently COPAR communicates over the Internet. Its novelty is in the way in which optimistic and pessimistic processing are combined.

BIOGRAPHY

Dr. Joel Crichlow is an Associate Professor in Computer Science and the Computer Science graduate coordinator at Rowan University, Glassboro, NJ. He also served as Visiting Research Scientist at the Seismographic Station, University of California, Berkeley; Commonwealth Academic Staff Fellow at the Computing Laboratory, University of Kent at Canterbury, England; and Chair and Senior Lecturer at the Department of Mathematics and Computer Science, University of the West Indies, Trinidad. He received a PhD in Mathematics in 1983 from the University of the West Indies. His present research area is Distributed Systems, in particular, the management of replicas in distributed transaction processing. Previously he did research in numerical modeling and analysis of seismic motions. He has several research publications and conference presentations, and has written the following textbooks:

An Introduction to Distributed and Parallel Computing, Prentice Hall, Int., U.K., 1988.
An Introduction to Distributed and Parallel Computing, 2nd Edition, Prentice Hall, Int., U.K., 1997.
The Essence of Distributed Systems, Prentice Hall (Pearson Education), 2000.
Distributed Systems – Computing over Networks, Prentice Hall India, 2009.

DEPARTMENT OF ELECTRICAL ENGINEERING & COMPUTER SCIENCE