

GENI: The NSF Initiative to Re-build the Internet

by Sirin Tekinay, CCF, NSF and ECE, NJIT

Date: November 21, 2005 (Monday)

Time: 2:30 pm

Place: 3730 GITC, NJIT

About the Speaker

Sirin Tekinay joined the Division of Computing and Communications Foundations (CCF), National Science Foundation as the Program Director for Theoretical Foundations in Communications Research in September 2005. She has been on faculty at Electrical and Computer Engineering Department, New Jersey Institute of Technology since 1997, where she is currently an associate professor. She was the recipient of NJIT's "Excellence in Graduate Teaching Award" in 2003. Before joining the academia, she worked at Bell Labs, Lucent Technologies, and NORTEL. Sirin received her Ph.D. degree in Electrical and Computer Engineering from George Mason University in 1994. She holds MS (1991) and BS (1989) degrees in Electrical Engineering from Bogazici University, Istanbul, Turkey. Her current research interests include cross layer wireless communication and network system design and analysis, traffic modeling, mobility and location problems, ad hoc and sensor networks. She holds seven patents. She has authored numerous publications, developed and offered courses. She is on the editorial boards of the IEEE Communications Magazine, and the IEEE Communications Surveys and Tutorials. She is a senior member of the IEEE, and the Eta Kappa Nu and Sigma Xi honor societies.

About the Talk

The Global Environment for Network Investigations (GENI); an initiative announced by the NSF in August 2005, has the ambitious yet timely objective of re-building the Internet. The approach is simply that of a "clean slate." The new Internet will not "have a wireless portion," rather, it will largely "be wireless." Data flows, mobility and location management, computing requirements, in addition to the well observed channel imperfections faced by wireless users, sensors, and other embedded wireless devices will clearly require a brand new network reference framework than the current central network model. Cooperation among the components of the new, wireless Internet will not only be defined by the layer at which it is implemented, but will in turn define the layers of the new reference model. This talk will give the vision of the new research areas and goals for GENI.

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