



Prof. Sajal Das

Prof. Sajal Kumar Das is the director of the Center for Research in Wireless Mobility and Networking (CRW-MaN). He is also a Professor in the department of Computer Science and Engineering, University of Texas at Arlington. He is also an adjunct faculty member of the CSE department at IIT Kanpur. His current research is in the area of cellular mobile communication and computing, wireless multimedia, sensor networks/computer security, broadband networking, parallel and distributed processing. He visited the CSE department during July 15 - August 9, 2006.

1 Research collaboration and related activities

Prof. Das continued research collaboration with Prof. R. K. Ghosh and his students on wireless sensor networks. This effort led to following joint work.

1. G. Das, R. K. Ghosh and S. K. Das, "On Designing Zero Overhead Protocols: Cooperation and Holistic Scheduling in Wireless Sensor Networks," submitted to IEEE Journal on Selected Areas in Communications, Aug 2006.
2. P. Agrawal, R. K. Ghosh and S. K. Das, "An Efficient Localization Scheme for Wireless Sensor Nodes using Proximity and Multilateration," to be submitted to IEEE International Conference on Distributed Systems (ICDCS 2007) by Oct 2006.
3. G. Das, R.K. Ghosh and S. K. Das, "Routing in Wireless Sensor Nodes With or Without Short-Cuts," to be submitted to ACM International Conference on Information Processing with Sensor Networks (IPSN 2007) by Nov 2006.
4. P. Agrawal, R. K. Ghosh and S. K. Das, "Security in Wireless Sensor Networks," under preparation.

Additionally, Prof. Das initiated preliminary collaboration with Prof. Phalguni Gupta on integrating sensor networks with Biometrics research for developing novel techniques and systems for national security. He visited Prof. Gupta's Biometrics Lab and had intense discussions with his group. Prof. Das had also exciting discussions with Prof. S. Biswas and Prof. H. Karnick on Systems Biology and Bioinformatics research. They exchanged papers to understand each other's work, with the goal of initiating future collaboration. Finally, Prof. Das discussed with Prof. D. Sanghi on network security as well as wireless mesh networks. Prof. Das also delivered a seminar talk on August 4, 2006 on his current research. The title of the talk was "Information Intensive Wireless Sensor Networks: Challenges and Solutions." As an Adjunct Professor of the CSE department, Prof. Das remotely co-supervises Piyush Agrawal working under Prof. Ghosh. During this visit, he met with Piyush on a regular basis to complete a couple of joint work ([2, 4] above). He also advised another student of Prof. Ghosh on building trust models in a grid computing environment, and a couple of students of Prof. Gupta on how to extend biometrics research to sensor networks.