



**WICAT Research Review**

**June 1 & 2, 2009**

**The Inn@Virginia Tech and Skelton Conference Center  
Blacksburg, VA**

**POSTER PRESENTATIONS**

**VIRGINIA TECH**

“The Impact of Channel Variation on Wireless Distributed Computing Networks”

Xuetao Chen, Dinesh Datla, Timothy Newman, Tamal Bose, and Jeff Reed

“Partial Update EDS Algorithms for Adaptive Filtering”

Bei Xie and Tamal Bose

“Robust Modulation Classification and Blind Equalization”

Barathram Ramakumar, Tamal Bose, and Ratchaneekorn Thamvichai

“Power Efficiency in Wireless Distributed Computing”

Dinesh Datla, Xuetao Chen, Timothy Newman, Jeff Reed, and Tamal Bose

“System Power Consumption Minimization for Multichannel Communications”

An He, Srikathyayani Srikanteswara, Kyung Kyoon Bae, Timothy R. Newman, Jeffrey H. Reed, William H. Tranter, Masoud Sajadieh, and Marian Verhelst

“The Benefit of Collaboration in Cognitive Radio”

Justin Kelly and Dr. R. Michael Buehrer

“Graph Based Backpressure Scheduling That Guarantees SINR”

Umesh Shukla and Allen B. MacKenzie

**AUBURN UNIVERSITY**

“A Control-Theoretic Approach to Rate Control for Streaming Videos”

Presenter: Shiwen Mao

“Enabling Cooperation in Mobile Ad Hoc Networks”

Santosh Kulkarni

“Collaborative Multi-Robot Search Strategies Using Wireless Communication”

Nida Bano, Chris Wilson, Sreekanth Boga, and Thaddeus Roppel

Presenter: Santosh Kulkarni

“Turbo Equalization for Doubly-Selective MIMO Fading Channels Using Exponential Basis Models”

Presenter: Hyosung Kim

## **UNIVERSITY OF VIRGINIA**

“Ultra Low Power Processing in Wireless Sensor Nodes”

John Lach and Benton Calhoun

“Accommodating Transmission Range Uncertainty in Deploying Wireless Ad Hoc Networks”

Kangyuan Zhu and Stephen Patek

“Track Based Vehicle Behavior Characterization”

Karen Cheng, Francis Tumbokon, Ritwik Sahu, Jonathan Bao, and Peter Beling

“Fundamental Research on Video Streaming for Technology-Based Classroom Learning Evaluation”

Qifeng Qiao, Xiao zhou, Peter Beling, and Barry Horowitz

“An Anytime Variant of a Minimum Probability of Error ATR Algorithm based on Pair-wise Performance Estimates”

Irwin Reyes, Peter Beling, and Barry Horowitz

“A Refined 2D Machine Vision System for Positioning an Industrial Robot”

Jie Xing, Mingyi Hong, Peter Beling, and Jianping Wang

## **POLYTECHNIC INSTITUTE OF NEW YORK UNIVERSITY**

“Saliency Based Objective Quality Assessment of Decoded Video Affected by Packet Loss”

Presenter: Tao Liu

“Scalable Video Multicast in Hybrid 3G/Ad-hoc Networks”

Presenter: Sha Hua

“Demonstration of BER Measurements in Cooperative Communications”

Presenter: Michael Knox

Demo: “Implementation of CoopPHY: A Protocol to Achieve Transmit Diversity in Single Antenna System” – Presenter: Shu Luo