



IEEE Mohawk Valley Section Systems Council Chapter Technical Presentation



*"NETWORK SCIENCE-BASED METRICS FOR
QUANTIFICATION OF LINK STABILITY FOR
MOBILE SENSOR NETWORKS"*

PRESENTER: PROF. NATARAJAN MEGHANATHAN



Key Areas

- ◆ Systems Engineering
- ◆ Modeling & Simulation
- ◆ Robust Design
- ◆ Project Management
- ◆ Mission Assurance
- ◆ Performance Metrics
- ◆ Test & Evaluation

Seminar Details

When: Thur, 3 May 2018
12:15 to 1:30PM

Where: GI Board Room
725 Daedalian Dr.
Rome, NY 13441

ABSTRACT: Mobile sensor networks comprise of sensor nodes that move independent of each other and the network topology changes dynamically. It is imperative to identify and use stable links to configure network-wide communication topologies (like data gathering trees). Prior to our research, the strategies for identifying stable links in mobile sensor networks were adapted from the area of mobile ad hoc networks (MANETs). However, the MANET-based strategies assume the availability of location and mobility information of the nodes and such a requirement would be too energy draining for the sensor nodes. The objective of our research is to investigate the use of network science-based graph theoretic metrics to quantify the stability of links in mobile sensor networks without knowing the location and mobility information of the nodes.

BIO: Dr. Natarajan Meghanathan is a tenured Full Professor of Computer Science at Jackson State University, Jackson, MS. He graduated with a Ph.D. in Computer Science from The University of Texas at Dallas in May 2005. Dr. Meghanathan has published more than 150 peer-reviewed articles (more than half of them being journal publications). He has received education and research grants from several federal agencies. Dr. Meghanathan has been serving in the editorial board of more than ten international journals and in the technical program committees and organization committees of several international conferences. His research interests are Wireless Ad hoc Networks and Sensor Networks, Graph Theory and Network Science, Cyber Security and Machine Learning.

Pizza will be provided (First 25 people). Please RSVP by 2 May 2018!!!

For more info, contact Vicki Sheardown at (315) 330-4708 or Rob Riley at (315) 330-4326