

Syllabus  
**17 November 2009**

Date	Speaker	Topic / Paper
September 8	rek	Introduction TCP Sliding Windows
September 15	rek rek rek	Congestion Control and Queuing TCP Congestion Control #1 Random Early Detection Gateways for Congestion Avoidance by Floyd and Jacobson
September 22	rek rek  rek	#2 Tuning RED for Web Traffic by Christiansen et al. [Bonus Paper] Promoting the Use of End-to-End Congestion Control in the Internet by Floyd and Fall #3 Core-Stateless Fair Queueing: a Scalable Architecture to Approximate Fair Bandwidth Allocations in High Speed Networks by Stoica et al.
September 29	Thangam  Guillaume	#4 The War between Mice and Elephants by Guo and Matta #5 Congestion Control for High Bandwidth-Delay Product Networks by Katabi et al.
October 6	William  Andrew  Rabin	#6 An Implementation and Experimental Study of the eXplicit Control Protocol (XCP) by Zhang and Henderson #7 An Analysis of the Skype Peer-to-Peer Internet Telephony Protocol by Baset and Schulzrinne #8 Understanding the Power of Pull-based Streaming Protocol: Can We Do Better by Zhang et al.
October 13	rek  Rabin, Thangam  Murad	#9 Defending Against Flooding-Based Denial of Service Attacks: A Tutorial by Chang Inferring Internet Denial-of-Service Activity by Moore et al. #10 Denial of Service Attack and Prevention on SIP VoIP Infrastructures Using DNS Flooding by Zhang et al.
October 20		<b>No Class</b>
October 27	rek rek	Wireless Primer #11 A Performance Comparison of Multi Hop Wireless Ad Hoc Network Routing Protocols by Broch et al.

	<b>William</b>	#12 VITP: An Information Transfer Protocol for Vehicular Computing by Dikaiakos et al.
<b>November 3</b>	<b>Thangam</b> <b>Guillaume</b> <b>Andrew and Murad</b>	#13 XORs in the Air: Practical Wireless Network Coding by Katti et al. #14 Robotic-Based Location Sensing for Wireless Ethernet by Ladd et al. #15 Understanding and Mitigating the Impact of RF Interference on 802.11 Networks by Gummadi et al.
<b>November 10</b>	<b>rek</b>  <b>rek</b>	#16 CARA: Collision-Aware Rate Adaptation for IEEE 802.11 WLANs by Kim et al. Wireless Sensor Networks Primer
<b>November 17</b>	<b>Rabin</b>  <b>rek</b>	#17 Energy-Efficient, Collision-Free Medium Access Control for Wireless Sensor Networks by Rajendran et al. #18 A New Method for Intrusion Detection on Hierarchical Wireless Sensor Networks by Chen et al.
<b>November 24</b>		No Class
<b>December 1</b>	<b>William and Guillaume</b>  <b>Murad</b>	#19 Secure Routing in Wireless Sensor Networks: Attacks and Countermeasures by Karlof and Wagner. #20 Ultra-Low Duty Cycle MAC with Scheduled Channel Polling by Ye et al.
<b>December 8</b>	<b>Andrew</b>  <b>Guillaume</b> <b>Rabin and Thangam</b> <b>Murad</b> <b>William</b> <b>Andrew</b>	#21 AS-MAC: An Asynchronous Scheduled MAC Protocol for Wireless Sensor Networks by Jang et al. Project Presentations (20 minutes each) Current Congestion Control Research Performance Analysis of Orb Kerberos Authentication Protocol Issues and Trends in Remote Medical Care Transmission Power Control in WSNs
<b>December 15</b>		<b>Final Exam</b>