

Syllabus  
September 26, 2006

Date	Speaker	Topic / Paper
September 5	rek	Introduction TCP Sliding Windows Congestion Control and Queuing
September 12	class rek	Computer Networking History TCP Congestion Control <b>"Random Early Detection Gateways for Congestion Avoidance"</b> by Floyd and Jacobson
September 19	rek rek	<b>"Tuning RED for Web Traffic"</b> by Christiansen et al. <b>"Core-Stateless Fair Queueing: a Scalable Architecture to Approximate Fair Bandwidth Allocations in High Speed Networks"</b> by Stoica et al.
September 26	Dan Courcy & Nate Salemme Joe Frate & Oleg Rekutin	<b>"The War between Mice and Elephants"</b> by Guo and Matta <b>"Congestion Control for High Bandwidth Delay Product Networks"</b> by Katabi et al.
October 3	Travis Grant & Harshal Pandya rek  Jeff Zhou	<b>"Designing DCCP: Congestion Control Without Reliability"</b> by Kohler et al. Introduction to 802.11 Wireless Protocols and Wireless Sensor Issues <b>"Interference-Aware Fair Rate Control in Wireless Sensor Networks"</b> by Rangwala et al.
October 10	Saurabh Gupta  Nikki Benecke	<b>"ExOr: Opportunistic Multi-Hop Routing for Wireless Networks"</b> by Biswas and Morris <b>"Idle Sense: An Optimal Access Method for High Throughput and Fairness in Rate Diverse Wireless LANs"</b> by Heusse et al.
October 17	Paul Ruggieri  Mike Putnam	<b>"Application-Based Collision Avoidance in Wireless Sensor Networks"</b> by Stathopoulos et al. <b>"Exploiting Idle Communication Power to Improve Wireless Network Performance and Energy Efficiency"</b> by Guo et al.
October 24	Dan Courcy  Travis Grant	<b>"XORs in the Air: Practical Wireless Network Coding"</b> Katti et al. <b>"Performance Enhancement of TFRC in Wireless Ad Hoc Networks"</b> by Li et al.
October 31	Harshal Pandya  Jeff Zhou &	<b>"Spray and Wait: An Efficient Routing Scheme for Intermittently Connected Mobile Networks"</b> by Spyropoulos et al. <b>"Defending against Flooding-Based Distributed Denial-</b>

	<b>Saurabh Gupta</b>	<i>of-Service Attacks: A Tutorial</i> ” by Chang & <i>“Distributed Denial of Service Attacks”</i> by Lau et al.
<b>November 7</b>	<b>Sarah Casey</b> <b>Nikki Benecke</b>	<i>“Secure Data Communication in Mobile Ad Hoc Networks”</i> by Papadimitratos and Haas <i>“DDoS Defense by Offense”</i> by Walfish et al.
<b>November 14</b>	<b>Joe Frate</b> <b>Nate Saleme</b>	<i>“Protecting Web Servers from Distributed Denial of Service Attacks”</i> by Kargl et al. <i>“Web Tap: Detecting Covert Web Traffic”</i> by Borders and Prakash
<b>November 28</b>	<b>Oleg Rekutin</b> <b>Paul Ruggieri</b>	<i>“Sustaining Availability of Web Services under Distributed Denial of Service Attacks”</i> by Xu and Lee <i>“TinySec: A Link Layer Security Architecture for Wireless Sensor Networks”</i> by Karlof et al.
<b>December 5</b>	<b>Mike Putnam</b> <b>Sarah Casey</b>	<i>“Secure Routing in Wireless Sensor Networks: Attacks and Countermeasures”</i> by Karlof and Wagner <i>“Detecting Critical Nodes for MANET Intrusion Detection Systems”</i> by Karygiannis et al.
<b>December 12</b>		<b>Final Exam</b>