

ATNAC 2006 Program

Monday 04-Dec-06	Plenary Session Opening		
9:00 - 9:05	Welcome Announcements	John Ellershaw, Executive Director, CUBIN, The University of Melbourne	
9:05 - 9:15	Official opening	General Chair, Rod Tucker, Director CUBIN, Federation Fellow and Laureate Professor, The University of Melbourne	
9:15 - 10:00	Lixia Zhang - Keynote Speaker	Professor of Computer Science, UCLA	<i>Architectures & protocols for large scale & high speed networks</i>
10:00 - 10:45	Lars Rasmussen - Keynote Speaker	Research Professor, Telecommunications, Uni of South Australia	<i>Education in Telecommunication - An Australian Perspective from an Outsider</i>
10:45 - 11:15 Morning Break			
Monday 04-Dec-06	Plenary Session Broadband Wireless		
11:15 - 11:45	Ray Owen	Director, Motorola Asia Pacific	<i>Wireless telecommunication infrastructure design for the developing world</i>
11:45 - 12:15	Eric Hamilton	Chief Technical Officer, Unwired Australia	<i>Challenges in Implementing a WiMAX Broadband Wireless Service in Australia</i>
12:15 - 12:45	Hugh Bradlow	Chief Technology Officer, Telstra	<i>Mobile Broadband Wireless Services</i>
12:45 - 1:45 Lunch			
Monday 04-Dec-06	Session M1A Access Networks	Session M1B Security and Sensor Networks	Poster Session 1
1:45 - 2:10	Delay in UMTS Radio Access Networks: Analytical Study and Validation, X. Li, S. Li, A. Timm-Giel, C. Gorg (University of Bremen, Germany), R. Schelb (Siemens AG, Germany) (81)	New Variants of Wormhole Attacks for Sensor Networks, W. Sharif, C. Leckie (NICTA, University of Melbourne) (1)	see separate list of poster papers
2:10 - 2:35	Low Cost TV Based Messaging for Remote Desert Communities, T. Evers, D. Franklin (University of Wollongong), A. Turk, M. McGinley (Murdoch University) (65)	Protecting Small Keys in Authentication Protocols for Wireless Sensor Networks, K. Singh, (Griffith University, QLD & IBM, QLD), K. Bhatt, V. Muthukkumarasamy (Griffith University, QLD) (33)	

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2:35 - 3:00	Quantifying the Broadband Access Bandwidth Demands of Typical Home Users, W. Harrop, G Armitage (Swinburne University of Technology) (74)	Chaos Based Key Management Architecture for Wireless Sensor Networks, R. Silva, N. Pereira (Polytechnic Institute of Beja, Portugal), M. Nunes (Technical University of Lisbon, Portugal) (62)	
3:00 - 3:25	Collision Probability in Saturated IEEE 802.11 Networks, H. L. Vu (Swinburne University of Technology), T. Sakurai (University of Melbourne) (48)	WHOMoVeS: An Optimized Broadband Sensor Network for Military Vehicle Tracking, N. Boudriga, M. Hamdi (University of November 7th at Carthage, Tunisia) (53)	
3:25 - 3:45 Afternoon break			
Monday 04-Dec-06	Session M2A Optical Networks 1	Session M2B Mobile and Wireless Networks	Poster Session 2
3:45 - 4:10	Closely Separated Dual Baseband Channel Generation and Separation for Provision of Broadcast Traffic in WDM-Passive Optical Networks, M. Attygalle, C. Chan, T. Nirmalathas (NICTA, University of Melbourne) (71)	Balancing GoS in Cellular Networks using Static Channel Relaying Strategy with Adaptive Threshold, T. Ngo, S. Perreau, A. Dadej (University of South Australia) (47)	see separate list of poster papers
4:10 - 4:35	Scalability of Ethernet Passive Optical Networks, M. Aquilina (CUBIN, University of Melbourne), C. Chae (NICTA, University of Melbourne) (28)	Joint Scheduling and Spreading Gain Optimisation for the Energy Consumption in CDMA-TDMA Based MANETs, S. Joarder, S. Perreau, A. Jayasuriya (University of South Australia) (34)	
4:35 - 5:00	Optimum Power Tapping Ratio in WDM Packet-based Access Networks incorporating E-CDMA Control Signalling, N. Nadarajah, A. Nirmalathas, E. Wong (NICTA, University of Melbourne) (61)	HIP Based Mobility Management for UMTS/WLAN Integrated Networks, J. So, J. Wang (RMIT University) (58)	
5:00 - 5:25	Effect of Modulator Chirp on Ultra-Long Haul Transmission with NRZ, G. Pendock (University of Melbourne) (68)	Performance Evaluation of the UTRAN Transport Network for the High Speed Downlink Packet Access, X. Yan, J. Khan (University of Newcastle), B. Jones (SingTel OPTUS, Sydney) (69)	

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Tuesday 05-Dec-06	Plenary Session Broadband Internet		
9:00 - 9:45	Rao Kotagiri	Professor & Head of Dept. Computer Science & Software Engineering, The University of Melbourne	<i>Defending Against Distributed Denial of Service Attacks</i>
9:45 - 10:30	Hugh Bradlow	Chief Technology Officer, Telstra	<i>Telecommunication technologies for a Web 2 world</i>
10:30 - 10:45 Morning Break			
Tuesday 05-Dec-06	Plenary Session Building the Broadband Internet		
10:45 - 11:15	Geoff Huston	Chief Scientist, APNIC & Centre for Advanced Internet Architectures, Swinburne University	<i>Net Neutrality</i>
11:15 - 11:45	Rod Tucker	Director CUBIN, Federation Fellow and Laureate Professor, The University of Melbourne	<i>How to build a petabit per second router</i>
11:45 - 12:15	Man Yong Park	Electronics and Telecommunications Research Institute, Korea	<i>Development Status of WDM-PON Technology in Korea</i>
12:15 - 12:45	Colin Goodwin	Vice President, Fibre To The Home Council Asia-Pac	<i>An overview of Fibre-to-the-Home (FTTH) across the Asia-Pacific region</i>
12:45 - 1:30 Lunch			
Tuesday 05-Dec-06	Session T1A Congestion Management	Session T1B Wireless Communications and systems	Session T1C Internet Security
1:30 - 1:55	Priority Queuing of Network Game Traffic over a DOCSIS Cable Modem Link, J. But, S. Burriss, G. Armitage (Swinburne University of Technology) (37)	A Comparison Between OFDM With TZCP Guard Time vs. Cyclic Prefix & Trailing Zeros, M. Farahmand, V. Zargari (Tamin Co, Iran) (2)	Mitigating Email Spam by Statistical Rejection of TCP Connections Using Recent Sender History, M. Tran, G. Armitage (Swinburne University of Technology) (67)
1:55 - 2:20	Controller Design for TCP Rate Management in QoS Networks, S. Athuraliya, H. Sirisena (University of Canterbury, New Zealand) (14)	Analysis and Evaluation of MB-OFDM Dual Carrier Modulation, D. Lowe, X. Huang (University of Wollongong) (40)	Hitlist Worm Detection using Source IP Address History, J. Chan, C. Leckie, T. Peng (NICTA, VRL, University of Melbourne) (76)

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2:20 - 2:45	A Preliminary Analysis of Loss Synchronisation between Concurrent TCP Flows, P.Jay, Q. Fu, G. Armitage (Swinburne University of Technology) (45)	Peformance of a Turbo Coded LEO DS-CDMA System in Uncorrelated and Correlated KA-Band Channels, N.Gule, E.O. Bejide (University of Cape Town, South Africa) (80)	Synthetic Sub-flow Pairs for Timely and Stable IP Traffic Identification, T.T.T. Nguyen, G. Armitage (Swinburne University of Technology) (29)
2:45 - 3:10	Neuron PID: A Robust AQM Scheme, J. Sun (Nanjing University of Science & Technology, China), S. Chan, K.T. Ko, G. Chen (City University of Hong Kong), M. Zukerman (University of Melbourne) (90)	On Hybrid Delay/Blocking Wireless Systems with Pre-emption and QoS, P. Fitzpatrick, M. Ivanovich (Telstra) (3)	Covert Channels in the IP Time to Live Field, S. Zander, G. Armitage, P. Branch (Swinburne University of Technology) (52)
3:10 - 3:30 Afternoon break			
Tuesday 05-Dec-06	Session T2A Internet Measurements	Session T2B Wireless Sensor Networks	Session T2C Network Design
3:30 - 3:55	Modeling of Session Persistence in Web Server Systems, R. Vesilo, W. Li (Macquarie University, NSW) (12)	Energy Efficient On-Demand Addressing for Wireless Sensor Networks, P. Hewage, R. Doss, H. Alwis, M. Chowdhury (Deakin University) (20)	Reconfiguration in Multi Class of Services Networks, R. Suryasaputra (RMIT University), A. Kist (University of Southern Queensland), R. Harris (Massey University, New Zealand) (39)
3:55 - 4:20	Measuring the Auto-correlation of Server to Client Traffic in First Person Shooter Games, P. Branch, G Armitage (Swinburne University of Technology) (32)	Address Reuse in Wireless Sensor Networks, R. Doss, D. Chandra, L. Pan, W. Zhou, M. Chowdhury (Deakin University) (23)	Joint Topology control and Path-Oriented Protection in Free Space Optical Networks, F. Shu, I. Ouveysi, M. Zukerman (The University of Melbourne) (85)
4:20 - 4:45	Monitoring and Classification of Teletraffic in P2P Environment, R. Rapuzzi, R. Bolla, M. Sciuto (University of Genoa, Italy) (54)	Wireless Sensor Networks - Selection of Routing Protocol for Applications, Y. Li, T. Newe (University of Limerick, Ireland) (63)	MPLS-TE Routing: Adopting a Generic Architecture and Evaluating Various Implementation Approaches, I. Chaieb, J. LeRoux (France Telecom R & D, France), B. Cousins (IRISA, France) (78)
4:45 - 5:10	Inferring Short Time Scale Traffic Characteristics from Long Time Scale Measurements, A. Coyle (University of Adelaide) (87)	Wireless Sensor Nodes for Habitat Monitoring, G. Pendock, L. Evans, G. Coulson (The University of Melbourne) (6)	The Bi-Mesh Survivable Network - Fast Recovery from Node Failure in MPLS enabled Networks, B. Northcote (University of Adelaide) (86)
7:00 for 7:30 Conference Dinner Zinc Restaurant Federation Square			

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Wednesday 06-Dec-06	Plenary Session Sensor Networks		
9:00 - 9:45	Stuart Milner	Research Professor & Director, Centre for Networking and Infrastructure Sensors, University of Maryland, USA	Scalable wireless sensor networks with assured connectivity and coverage
9:45 - 10:30	Bruce Hemingway	Lecturer and Manager of the Baxter Computer Engineering Laboratory, University of Washington, USA	Variations on the Flock: Wireless Embedded Systems in an Undergraduate Curriculum
10:30 - 10:45 Morning break			
Wednesday 06-Dec-06	Plenary Session Wireless Networks		
10:45 - 11:15	Rob Evans	Director Victoria Research Laboratory, NICTA	Wireless sensor networks, information theory and stochastic control
11:15 - 11:45	Toshiaki Kuri	National Institute of Information & Communications Technology (NICT), Japan	Enabling Technology for Scaleable WDM Millimeter- Wave-Band Fibre-Radio Systems
11:45 - 12:15	Stan Skafidas	Program Leader Sensor Networks, NICTA	Advances in millimeter wave communication
12:15 - 12:45	Simon Curry	Intel Australia	Mobile wireless broadband: an effective alternative to traditional broadband services
12:45 - 1:30 Lunch			
Wednesday 06-Dec-06	Session W1A Optical Networks 2	Session W1B Ad Hoc Networks	Sensor Network Workshop
1:30 - 1:55	Optical Power Constraints in Future All-Optical Networks, K Hinton, P. Farrell, R. Ayre (The University of Melbourne) (30)	H.264 Compression Based Improvement in Hop Count and Power Consumption of MANETs, H. Asif, T.Sheltami (King Fahd University of Petroleum & Minerals, Dhahran) (26)	
1:55 - 2:20	Automatically Switched Optical Network Path Selection Using Eye Closure Penalty, K. Hinton (CUBIN, University of Melbourne), J. Li, P. Farrell, S. Dods (NICTA, University of Melbourne) (31)	Dynamic Distributed Contention Window Control in Wireless AD Hoc LANs, S. Romaszko, C. Blondia (University of Antwerp, Belgium) (9)	

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2:20 - 2:45	Transient Control in ASONS, K. Hinton, P. Farrell, P. Dower (The University of Melbourne) (36)	Channel MAC: A Novel Medium Access Control Paradigm for Wireless Ad Hoc Networks, M. Ashraf, A. Jayasuriya, S. Perreau, L. Rasmussen (University of South Australia) (19)	
2:45 - 3:10	Planning & Dimensioning of Optical Label Switched Networks: A QoS-based Approach, N. Boudriga, Y. Khlifi, S. Fatmi (University of November 7th at Carthage, Tunisia) (50)	A Case for Cross Layer Design: The Impact of Physical Layer Properties on Routing Protocol Performance in MANETs, R. Doss, L. Pan, (Deakin University) (22)	
3:10 - 3:30 Afternoon break			
Wednesday 06-Dec-06	Session W2A Media Services	Session W2B MIMO and OFDM	Sensor Network Workshop
3:30 - 3:55	Features required of a Broadband Access Network capable of supporting IP based Television Series, Phillip Stevens (Content Management, Siemens Ltd Communications) (invited)	Time Variation Characteristics of MIMO-OFDM Broadband Channels in Populated Indoor Environments, J. Das Gupta, K. Ziri-Castro, R. Addie (University of Southern Queensland) (42)	
3:55 - 4:20	Converging Mobile and Broadband Networks with IMS, T. Coyle (Senior Solutions Manager, Ericsson Australia/NZ) (invited)	Performance of Antenna Selection for MIMO-OFDM Systems Based on Measured Indoor Correlated Frequency Selective Channels, Z. Tang, H. Suzuki, I.B.Collings (CSIRO ICT Centre, NSW) (41)	
4:20 - 4:45	Error-Resilient Scalable Video over the Internet, M. Lee, R. Qiao, K. Bengston (CSIRO ICT Centre) (7)	Implementation of 4 x 4 MIMO-OFDM-LDPC Achieving 600 Mbps Packet Transmission, H. Suzuki, M.Hedley, G. Daniels, I.B.Collings (CSIRO ICT Centre, NSW) (46)	
4:45 - 5:10	Topological Optimisation for Online First Person Shooter Game Server Discovery, G. Armitage, C. Javier, S. Zander (Swinburne University of Technology) (38)	Performance of Space-Time Block Coded OFDM in Time-Selective Macrocell Channel Environments, Z. Hussain, F. Al-Qahtani (RMIT University) (92)	