



# PACRIM 2011



# Conference Program



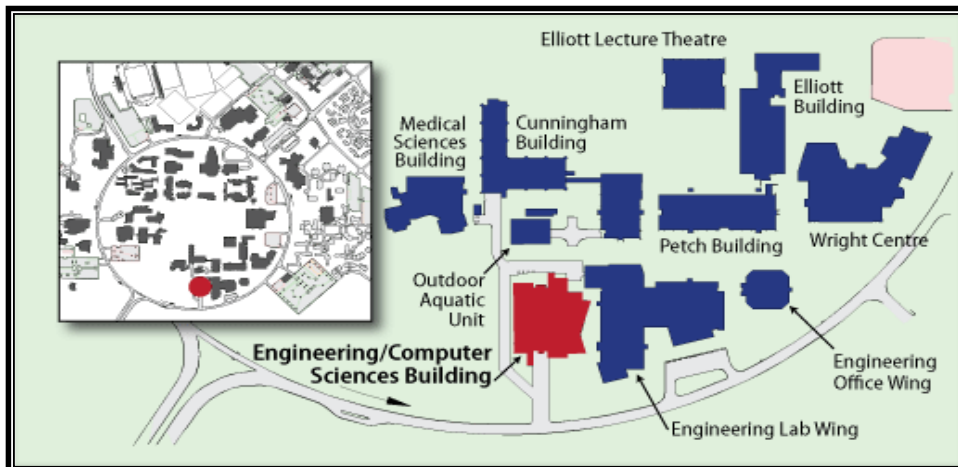
Tuesday August 23, 2011

18:00 - 20:00

Welcoming Reception - (University Club)

Wednesday August 24, 2011

8:45 - 9:00	Opening Ceremony (ECS-125)				
9:00 - 10:10	Keynote Address (ECS-125)				
10:10 - 10:30	Nutrition Break (ECS Lobby)				
<b>TRACK</b>	<b>W11 (ECS-104)</b>	<b>W12 (ECS-108)</b>	<b>W13 (ECS-116)</b>	<b>W14 (ECS-124)</b>	<b>W15 (ECS-130)</b>
10:30 - 12:30	Image Processing I	Routing and Heterogeneous Network Design I	Algorithms	Software and Solutions I	Congestion Control and Transport Protocols
	Chair: Pan Agathoklis	Chair: Trajkovic Ljiljana	Chair: Kin Fun Li	Chair: Michael McGuire	Chair: Fayez Gebali
1	Image Representation Using Triangle Meshes with Explicit Discontinuities	MeshCBD: A Heterogeneous Wireless Mesh Networks Testbed with distinct Bandwidth Difference	Ranking Documents using Similarity-based PageRanks	Harmful Algal Bloom Recognition based on Microscopic Images	Congestion control method with fair resource allocation for cloud computing environments
	Xi Tu, Michael Adams	Hai Wang	Shota Hatakenaka, Takao Miura	Aaron Gulliver, Haiyong Zheng, Guangrong Ji, Bing Zheng, Hao Zhang	Takuro Tomita, Shinichi Kuribayashi
2	A Color Palette Reduction Method Using Multiobjective Evolutionary Clustering Algorithm	Effects of routing granularity on communication performance in OpenFlow networks	Genetic Algorithm to Solve the Lot-sizing Problem with Multi-supplier and Quantity Discount	A Flexible Architecture for the Multiplier in Hybrid Cryptosystems	Evaluation of Fairness in Multiplayer Network Games
	Motonari Sadohira, Akio Saito, Hernan Aguirre, Kiyoshi Tanaka	Hiroyuki Kudou, Masayoshi Shimamura, Takeshi Ikenaga, Masato Tsuru	Amy Lee, He-Yau Kang	Jianzhou Li, Hua Li, Wei Dong	Ryo Hirota, Shinichi Kuribayashi
3	A Statistical Approach for Comparing the Performances of Corner Detectors	Probabilistic Quota Based Adaptive Routing in Opportunistic Networks	Square Root Update Acceleration of the EM Algorithm in Gaussian Mixture Processes	On Learning Repeated Combinatorial Auctions	An Improved TCP Congestion Control Algorithm for Wireless Networks
	Nadia Kanwal, Shoab Ehsan, Erkan Bostanci, Adrian F. Clark	Md. Anindya Prodhon, Rajkumar Das, Md. Humayun Kabir, Gholamali Shoja	Isamu Shioya, Takao Miura	Seichi Arai, Takao Miura	Ahmed Khurshid, Md. Humayun Kabir, Md. Anindya Prodhon
4	Investigating a Relationship for MISO Reconstruction-based Image Super resolution Techniques Using Limited Data	A Novel Routing Algorithm Based on Dynamic Clustering for LEO Satellite Networks			Performance Evaluation of Flow Fairness in Proxy-based TCP for Ad Hoc Network
	Toufeeq Ahmad, Xu Yan	Zhian Yang, Fei Long, Fuchun Sun			Masato Matsumoto, Miki Yamamoto
5					
12:10 - 13:30	Lunch (ECS Lobby)				



Wednesday August 24, 2011					
TRACK	W21 (ECS-104)	W22 (ECS-108)	W23 (ECS-116)	W24 (ECS-124)	W25 (ECS-130)
13:30-15:10	<b>Image Processing II</b>	<b>Audio Signal Processing I</b>	<b>Video Processing</b>	<b>Multicore and Parallel</b>	<b>New Perspectives I</b>
	<b>Chair: Ana-Maria Sevcenco</b>	<b>Chair: Peter Driessen</b>	<b>Chair: Ivan Bajic</b>	<b>Chair: Munehiro Fukuda</b>	<b>Chair: Jacqueline Rice</b>
1	Vector Image Retrieval Based on Approximation of Bezier Curves with Line Segments	A Time-Domain Derivation of the Telegraph Equation to Describe Sound Propagation in Rigid Tubes	A framework for motion capture system design using Cramer-Rao lower bound	A Parallelization of Orchard Temperature Predicting Programs	On Predicting Vehicle Tracks
	Ryosuke Fujita, Takahiro Hayashi	Bernie Till, Peter Driessen	Saifeddine ALOUI, Christophe VILLIEN, Suzanne LESECQ	Elad Mazurek, Munehiro Fukuda	Sathiamoorthy Manoharan, Xiaowen Gong
2	Underwater Imaging based on Inhomogeneous Illumination	Two-stage Underdetermined Speech Source Separation using Frequency Normalization	Multiplicative Video Watermarking with Semi-blind Maximum Likelihood Decoding for Copyright Protection	Efficient Handling of Stream Buffers in GPU Stream-based Computing Platform	Threshold Decision Method for Subtractive Color Process for Lossless Compression
	Aaron Gulliver, Hao Zhang, Bing Zheng, Haiyong Zheng	Vinod V. Reddy, Farook Sattar, Boon P. Ng, Peter. F. Driessen	Hanieh Khalilian, Ivan Bajic	Shinichi Yamagiwa, Masahiro Arai, Koichi Wada	Ayumu Akaoka, Yasuyuki Miura, Shigeyoshi Watanabe
3	Low-Frequency Band Noise Suppression Using Bone Conducted Speech	A New Method for Classification of Events in Noisy Hydrophone Data	Robust MRF-based Object Tracking and Graph-Cut-Based Contour Refinement for High Quality 2D to 3D Video Conversion	Accelerating the MMD algorithm using Multi-core Environments	Techniques for ESOP-Based Toffoli Cascade Generation
	M. Shahidur Rahman, Atanu Saha, Tetsuya Shimamura	Farook Sattar, Peter. F. Driessen, George Tzanetakis	Junsoo Kim, Yoonsik Choe, Yong-Goo Kim	Kenneth Kent, Michael Schlosser, Rainer Herpers	Jacqueline Rice, Noor Nayeem
4	Image tamper detection and recovery using differential embedding strategy	Automatic Event Detection for Long-term Monitoring of Hydrophone Data	Video Object Extraction with Interactive Image Cutout and Active Search	Prototyping Color Timed Petri Nets	Solving the Multiobjective Environmental/Economic Dispatch Problem with Prohibited Operating Zones using NSGA-II
	Ching-Sheng Hsu, Shu-Fen Tu	Farook Sattar, Peter F. Driessen, George Tzanetakis, Steven R. Ness	Takahiro Hayashi, Yuta Watanabe	Yuta Ikeda, Takao Miura	Robert Ah King, Harry Rughooputh, Kalyanmoy Deb
5		Sensor Fusion: Towards a Fully Expressive 3D Music Control Interface	Similarity Evaluation Algorithm for Concealing Frame Loss Error in Multi-View Video Transmission	Optimization of OpenFOAM's Linear Solvers on Emerging Multi-core Platforms	
		Shawn Trail, Gabrielle Odowichuk, Wendy Nie, Peter Driessen	Yanling Xu, Qiuguo Yao	Zahra Jamshidi, Farshad Khunjush	
15:10 - 15:30	<b>Nutrition Break (ECS Lobby)</b>				
TRACK	W31 (ECS-104)	W32 (ECS-108)	W33 (ECS-116)	W34 (ECS-124)	W35 (ECS-125)
15:30-17:30	<b>Resource Management</b>	<b>Video Coding and its Applications</b>	<b>Data and Decisions</b>	<b>Cognitive and Relay Communications</b>	<b>Networks and Agents</b>
	<b>Chair: Richard Shi</b>	<b>Chair: Ivan Bajic</b>	<b>Chair: Kosuke Takano</b>	<b>Chair: Geoffrey Messier</b>	<b>Chair: Michael Horie</b>
1	Multihop Routing and Resource Allocation for Multimedia Applications in Dynamic Spectrum Access Networks	Selective Merging-based Reference Frame Memory Compression	A C compiler for Large Data Sequential Processing using Remote Memory	Improving the Design of Relay Nodes for Cooperative Opportunistic Beamforming	Link-Sharing Method of Buffer in Direct-Connection Network
	Jingkai Su, Alexander Wyglinski	Yoonsik Choe	Shiyo Yoshimura, Hiroko Midorikawa	Geoffrey Messier, Jean-Francois Bousquet, Sebastian Magierowski	Naohisa Fukase, Yasuyuki Miura, Shigeyoshi Watanabe
2	Improvement in Vehicular Networking Efficiency Using a New Combined WIMAX and DSRC System Design	Adaptive Rate Control in Unit-layer for H.264/AVC	Heuristic Search Based on Branch and Bound Method for Task Scheduling Taking Account of Communication Overhead	Primary User Emulation Detection Using Frequency Domain Action Recognition	Distributed Shared Memory Based on Offloading to Cluster Network
	Nicholas Doyle, Nabih Jaber, Kemal Tepe	Min-Cheol Hong	Masahiko Utsunomiya, Ryuji Shioda, Munenori Kai	Di Pu, Alexander Wyglinski	Shinsuke Kawaguchi, Koichi Wada, Masaaki Ono, Naoki Yonezawa
3	Characteristic analysis of flow admission control based on equality when requested bandwidth follows different distributions	Spatio-Temporal Super-Resolution from Compressed Video Employing Global and Local Motion	SPEDS: A Framework for Mining Sequential Patterns in Evolving Data Streams	Performance Analysis of Relay-Assisted Mobile-to-Mobile Communication in Double or Cascaded Rayleigh Fading	Agent-Based Workbench for On-the-Fly Sensor-Data Analysis
	Takuto Kimura, Sumiko Miyata, Katsunori Yamaoka	Ivan V. Bajic	Amany Soliman, Gamal Ebrahim, Hoda Mohammed	Indrakshi Dey, Rahul Nagraj, Geoffrey Messier, Sebastian Magierowski	Munehiro Fukuda
4	Power Saving Scheme with Low-Utilization Station Aggregation for Radio-On-Demand Networks	Adaptive Quantization for Transform-domain Wyner-Ziv Residual Coding	Hybrid Search Based Association Rule Mining	Geo-Statistical Analysis of Wireless Spectrum Occupancy using Extreme Value Theory	A Multi-Process Library for Multi-Agent and Spatial Simulation
	Kaname Fujimoto, Daiki Nobayashi, Yutaka Fukuda, Takeshi Ikenaga, Tetsuya Ito	Byeungwoo Jeon	Hamed Sallam, Ahmed Ghanem	Sean Roche, Alexander Wyglinski	John Emau, Timothy Chuang, Munehiro Fukuda
5	Control Strategies on Cross-layer Optimization within Secondary Spectrum Access Networks	New Distributed Source Coding Scheme based on LDPC Codes with Source Revealing Rate-Adaptation		A Greedy Channel Restoration Scheme for Opportunistic Spectrum Access	Neural Networks Approach to Biocomposites Processing
	Lin Shen, Sean Roche, Si Chen, Hanyuan Lu, Alexander Wyglinski	Sang-Hyo Kim		Arash Azarfard, Jean-Francois Frigon, Brunilde Sanso	Joel-Ahmed Mondol, Satyanarayan Panigrahi, Madan Gupta
6		LDPC based Distributed Video Coding with Multiple Side Information Sets			
		Doug Young Suh			
18:30	<b>Conference Banquet (University Club)</b>				

Thursday, August 25, 2011					
TRACK	T11 (ECS-104)	T12 (ECS-108)	T13 (ECS-116)	T14 (ECS-124)	T15 (ECS-125)
8:50-10:10	<b>Biomedical Signal Processing</b>	<b>New Perspectives I</b>	<b>Software and Solutions II</b>	<b>Communication Theory</b>	<b>Nuts and Bolts I</b>
	<b>Chair: Onat Yazir</b>	<b>Chair: Kenneth Kent</b>	<b>Chair: Celina Gibbs</b>	<b>Chair: Alexander Wyglinski</b>	<b>Chair: Michael Miller</b>
1	De-Blurring Wireless Capsule Endoscopy Images by Total Variation Minimization	Matching 3D objects using principle curvatures descriptors	An Adaptive Learning Book System based on User's Study Interest	Impact of Imperfect Channel State Information on Cooperative Communications	A Simple Approach for Designing Online Testable Reversible Circuits
	Haiying Liu, Wu-Sheng Lu, Max Q.-H. Meng	Mohamed H. MOUSA	Kosuke Takano, Kin Li	Mohamad Khattar Awad, Veluppillai Mahinthan, Jon W. Mark, Xuemin (Sherman) Shen	Noor Nayeem, Jacqueline Rice
2	Automatic Artefact Detection in a Self-Faced Brain-Computer Interface System	3D object compression using enhanced stripification technique	Design and Implementation of Serializing Method for Non-procedural Object Transfer between JavaVMs	BER Minimization for Cognitive Radio Systems with Difference Antenna Selection	On Designing a Ternary Reversible Circuit for Online Testability
	Xinyi Yong, Mehrdad Fatourehchi, Rabab Ward, Gary Birch	Fatma Khairy, Mohamed H. Mousa, Mohamed Seddeik, Hamed Nassar	Daisuke Yamaguchi, Yuuki Akai, Munenori Kai	Yue Wang, Justin Coon	Md Raqibur Rahman, Jacqueline E. Rice
3	Computer-Aided Diagnosis of Mass Screenings for Gastric Cancer Using Double Contrast X-ray Images	Design and Implementation of an Inflate Acceleration Core	A Comparison on Interactivity of Three Linux Schedulers in Embedded System	Capacity of 60 GHz Wireless Communication Systems over Ricean Fading Channels	An Arithmetic Logic Unit Design Based on Reversible Logic Gates
	Koji Abe, Tetsuya Nobuoka, Masahide Minami	Joseph Libby, Kenneth Kent	Yigui Luo, Baolin Wu	Aaron Gulliver, Hao Zhang, Ting Ting Lu, Jing Jing Wang	Zhijin Guan, Wenjuan Li, Weiping Ding, Yueqin Hang, Lihui Ni
4	Design and Implementation of a Low Cost Electronic Stethoscope	Design and Performance Analysis of CAPE based on Discontinuous Incremental Checkpoints	Software Copy Protection and Licensing based on XrML and PKCS11	On the Capacity of 60 GHz Wireless Communications over IEEE 802.15.3c Channel Models	NCV Realization of MCT Gates with Mixed Controls
	Christian McMechan, Poman So	Viet Hai Ha, Eric Renault	Mohab Usama, Mohamed Sobh	Aaron Gulliver, Hao Zhang, Ning Xu, Jingjing Wang	Zahra Sasanian, D. Michael Miller
5	Simple Lossless and Near-Lossless Medical Image Compression Based on Enhanced DPCM Transformation	Modeling a Quantum Processor using the QRAM Model	Spinal Tap: High Level Analysis for Heavy Metal Systems	Interference Minimization Approach for Distributed Beamforming in Cognitive Two-Way Relay Networks	
	Farshid Sepehrband, Jeyran Choupan, Mohammad Mortazavi	Mostafa Elhoushi, M. Watheq El-Kharashi, Hatem Elrefaei	Nieraj Singh, Celina Gibbs, Dean Pucsek, Martin Salois, Jonah Wall, Yvonne Coady	Seyed Hamid Safavi, Ramezan Ali Sadegh Zadeh, Wahid Jamali, Soheil Salari	
10:10-10:30	<b>Nutrition Break (ECS Lobby)</b>				
TRACK	T21 (ECS-104)	T22 (ECS-108)	T23 (ECS-116)	T24 (ECS-124)	T25 (ECS-125)
10:30-12:10	<b>Multimedia Services</b>	<b>PHY Waveform, Antenna</b>	<b>Multimedia Coding</b>	<b>Localization and UWB Communications</b>	<b>Cognitive and Cooperative Networks</b>
	<b>Chair: Deepali Arora</b>	<b>Chair: Rod Herring</b>	<b>Chair Ulrich Spiedel</b>	<b>Chair: Hong-Chuan Yang</b>	<b>Chair: Jianping Pan</b>
1	Multicast group aggregation methods to decrease IGMP load for IPTV services and their performance evaluation	Brillouin Precursor Propagation through Water with Static Conductivity	Improvements of Data Embedding in DCT Compressed Domain	Ultra-wideband Ranging in Non-Line of Sight Environments	Area Spectral Efficiency of Infrastructure-Relay Enhanced Single-Cell Wireless Systems
	Shingo Matsuura, Masayoshi Shimamura, Katsuyoshi Iida	Aaron Gulliver, Hao Zhang, Gouping Zhang	KokSheik Wong, Mustafa S. Abdul Karim, Kiyoshi Tanaka	Aaron Gulliver, Hao Zhang, Xue-rong Cui	Lei Zhang, Hong-Chuan Yang, Mazen Hasna
2	Power-aware, Bandwidth-aware and Video-quality-aware Cooperative Routing algorithm for 3D video transmission in Wireless Networks	Evanescence-Mode Filters with Arbitrarily Positioned Ridges in Circular Waveguide	Scalable Video Coding Based on High Efficiency Video Coding (HEVC)	Performance of TH-PPM UWB Systems in the Presence of IEEE 802.11a Interference	Cognitive Wireless Mesh Networks: A Connectivity Preserving and Interference Minimizing Channel Assignment Scheme
	Hong-Hsu Yen	Seng Yong Yu, Jens Bornemann	Hyomin Choi, Junghak Nam, Donggyu Sim, Ivan V. Bajic	Aaron Gulliver, Hao Zhang, Hong Jiao Zhang, Xue Rong Cui	Maryam Ahmadi, Jianping Pan
3	Interruption Time Reduction Methods by Predicting Data Reception for Steaming Delivery on Hybrid Broadcasting Environments	Software Radio Measurements of Earth Atmosphere's Refractive Indices	Hybrid Temporal/Spatial Error Concealment Strategy Robust to Scene Transitions	An Improved Taylor-series Location Algorithm for the IEEE 802.15.4a Channel Model	Impact of Group Cooperation over Competitive Secondary Subnetworks
	Masahiro Umezawa, Tomoki Yoshihisa, Takahiro Hara, Shojiro Nishio	Rodney Herring, Kevin McCaugherty, Gabrielle Odowichuk, Peter Driessen	Abhishek Midya, Somnath Sengupta	Aaron Gulliver, Hao Zhang, Mei Yu, Xue-rong Cui	Si Chen, Chittabrata Ghosh, Alexander Wyglinski, Sudharman Jayaweera
4	Approximation analysis of QoS metrics in a finite capacity queue for real-time communication	Pulse Waveforms for 60 GHz Impulse Radio Communications	Performance Analysis of Video Encoders for Wireless Video Sensor Networks	Two-range Connectivity-based Sensor Network Localization	On the Performance of AF Opportunistic Relaying with Adaptive Transmission over Rayleigh Fading Channels
	Masaaki Takano, Katsuyoshi Iida	Aaron Gulliver, Hao Zhang, Ting Ting Lu, Jing Jing Wang	Noreen Imran, Boon-Chong Seet, Alvis Fong	Dapeng Qiao, Grantham K.H. Pang	Mohamad Torabi, David Haccoun, Jean-Francois Frigon
5			A Efficient Parallel Deblocking Filter Based on GPU: Implementation and Optimization	Localization in Wireless Sensor Networks with Gradient Descent	
			Huayou Su, Chunyuan Zhang, Jun Chai, Qianming Yang	Dapeng Qiao, Grantham K.H. Pang	
12:10-13:30	<b>Lunch (ECS Lobby)</b>				

**Thursday, August 25, 2011**

TRACK	T31 (ECS-104)	T32 (ECS-108)	T33 (ECS-116)	T34 (ECS-124)	T35 (ECS-125)
13:30-15:10	<b>Array Signal Processing</b>	<b>Routing and Heterogeneous Network Design (II)</b>	<b>Application I Chair: Lin Cai</b>	<b>Communication System Design and Analysis I</b>	
	<b>Chair: Pan Agathoklis</b>	<b>Chair: Stephen Neville</b>	<b>Chair: Lin Cai</b>	<b>Chair: Faye Gebali</b>	
1	Broadband Beamforming Using 2D Trapezoidal Filters and Nested Arrays	Effectiveness of Priority and Path Control Schemes for Grid Applications	Energy-aware Image Aggregation in Wireless Visual Sensor Networks	Energy Detection Receivers for 60 GHz Binary PPM Systems over IEEE 802.15.3c Channels	
	Iman Moazzen, Panajotis Agathoklis	Katsuichi Nakamura, Takeshi Ikenaga, Yuji Oie	Hong-Hsu Yen	Aaron Gulliver, Hao Zhang, Na Li, Jingjing Wang	
2	The 3D On-axis Space-time Scalar Impulse Response Field of the Parabolic Reflector in the Focal Plane	Assessing the Performance of AODV, DYMO, and OLSR Routing Protocols in the Context of Larger-scale Denser MANETs	Energy aware and highly Secured Data Aggregation for Grid-based Asynchronous Wireless Sensor Networks	Performance of Multihop Decode-and-Forward (DF) and Amplify-and-Forward (AF) Relay Networks with Channel Estimation	
	Mehdi Ataei Naeini Leonard Bruton	Deepali Arora, Eamon Millman, Stephen W. Neville	Motahareh Bahrami Zanjani, Arash Boustani	Gillian Huang, Yue Wang, Justin Coon	
3	Wideband Direction Finding Using Cumulant with Interpolated Array	Collection and Characterization of BCNET BGP Traffic	File Transmission Methods to Mobile Sinks for Ubiquitous Sensor Environments	Error Probability of 60 GHz PAM Systems with Different Pulse Waveforms	
	Maryam Johnny, Milad Johnny	Sukhchandan Lally, Tanjila Farah, Rajvir Gill, Ravinder Paul, Ljiljana Trajkovic	Tomoki Yoshihisa, Shojiro Nishio	Aaron Gulliver, Hao Zhang, Ting Ting Lu, Wei Wang	
4		A Combined Multicast Routing Protocol in Mobile Ad Hoc Networks	Centralized Association Management for Radio-On-Demand Networks		
		Xia Deng, Jian-xin Wang, Yao Liu	Daiki Nobayashi, Kaname Fujimoto, Yutaka Fukuda, Takeshi Ikenaga, Tetsuya Ito		
5					

**15:10-15:30 Nutrition Break (ECS Lobby)**

TRACK	T41 (ECS-104)	T42 (ECS-108)	T43 (ECS-116)	T44 (ECS-124)	T45 (ECS-125)
15:30-17:30	<b>Filter Design and Implementation</b>	<b>Security</b>	<b>Communication System Design and Analysis II</b>	<b>Application II</b>	
	<b>Chair: Wu-Sheng Lu</b>	<b>Chair: Stephen Neville</b>	<b>Chair: Aaron Gulliver</b>	<b>Chair: Chris Matthews</b>	
1	A New Class of Spatially-Discrete Time-Continuous 2D IIR Filters Based on Wave-Digital-Filter Theory	Replay Attacks and Detection in Tactical MANETs	A Novel UWB Pulse Generator	Performance Analysis of New Zealand Websites using HTTP Header Values	
	Arjuna Madanayake, Len Bruton, Leonid Belostotski, Nilanka Rajapaksha, Chamith Wijenayake, Kye-Shin Lee	Li Li, David Kidston, Phil Vigneron, Peter Mason	Aaron Gulliver, Hao Zhang, Xing Liu, Na Li	Sathiamoorthy Manoharan, Rajalaxmi Chandran	
2	Complexity Reduction in the Realization of Null Space-Based LDA	A Combined Approach for Distinguishing Different Types of Jamming Attacks Against Wireless Networks	Suboptimal Precoder Design for BS-CDMA Systems Using Chu Sequences as the Spreading Codes	IP Network Construction Learning System utilizing Virtual Router	
	Hwang-Ki Min, Yuxi Hou, Ickho Song, Sunyoung Lee, Taehun An, Seungwon Lee, Wonju Lee	Le Wang, Alexander Wyglinski	Yue Wang, Justin Coon	Nobukazu Iguchi, Msahiro Kurauchi, Yukinori Tsujimoto, Takashi Nishijima	
3	AN ADVANCED GENETIC ALGORITHM FOR DESIGNING 2-D FIR FILTERS	A Dynamic Model Building Process for Virtual Network Security Assessment	Effects of Angle-of-Arrival Estimation Errors, Angular Spread and Antenna Beamwidth on the Performance of Reconfigurable SISO Systems	Methods for XML Phrase Query Processing over a Collection of XML Documents	
	BOUDJELABA Kamal, ROS Frédéric, CHIKOUCHE Djamel	richard goyette, ahmed karmouch	Vida Vakilian, Jean-Francois Frigon, Sebastien Roy	Tuhin Paul, Md. Humayun Kabir, Md. Anindya Prodhana, Maria Chowdhury	
4	Recovery of Sparse Signals from Noisy Measurements Using an $\ell_1$ - $\ell_2$ -Regularized Least-Squares Algorithm	A Multiple-stage Classifier for Discovering Unknown Internet Traffic	New Performance Estimation Scheme for Broadband Communications over Power Lines in House and its Applications	Client Bandwidth: The Forgotten Metric of Online Storage Providers	
	Jeevan Pant, Wu-Sheng Lu, Andreas Antoniou	Wei Lu, Ali Ghorbani	Mikio Mizutani, Masato Tsuru, Yuji Oie	Andreas Bergen, Yvonne Coody, Rick McGeer	
5	New Algorithms for Sparse Representation of Discrete Signals Based on $\ell_1$ - $\ell_2$ Optimization	New mobile payment protocol: Mobile Pay Center Protocol 2 (MPCP2) By using new Key agreement protocol: VAM	The Impact of Antenna Design and Frequency on Underwater Wireless Communications	An Evaluation of the Bayesian CRLB for Time-Varying MIMO Channel Estimation Using Complex-Valued Differentials	
	Jie Yan, Wu-Sheng Lu	Mohammad Vahid alizadeh dizaj, Reza Askari moghaddam, Samad Momenbellah	Aaron Gulliver, Hao Zhang, Dawei Geng, Guoping Zhang	Srikanth Pagadarai, Alexander Wyglinski, Christopher Anderson	

**Friday, August 26, 2011**

TRACK	F11 (ECS-104)	F12 (ECS-108)	F13 (ECS-116)	F14 (ECS-124)	F15 (ECS-125)
8:50-10:30	<b>Audio Signal Processing II</b>	<b>Nuts and Bolts II</b>	<b>OFDM and MIMO</b>	<b>Modeling and Analysis</b>	
	<b>Chair: Michael McGuire</b>	<b>Chair: Mihai Sima</b>	<b>Chair: Bruce Cockburn</b>	<b>Chair: Stephen Neville</b>	
1	Sound Classification for Hearing Aids Using Time-frequency Images	Accurate Floating-point Operation using Controlled Floating-point Precision	Performance of OFDM with AGC at 340MHz	An Analytical Method Considering Bursty Traffic for Data Transfer in High-speed Networks	
	Koji Abe, Hidetoshi Sakae, Takatoshi Okuno, Kiyooki Terada	Ahmed Zaki, Ayman BahaaEldin, Mohamed El-Shafey, Gamal Aly	Aaron Gulliver, Wencheng Chen, Jia Song, Derong Chen, Wei Li	Keijiro Murakami, Ken-ichi Baba, Takefumi Moriguchi	
2	Towards Audio-Video Based Handwritten Mathematical Content Recognition in Classroom Videos	Embedded hardware solution for Principal Component Analysis	Multicarrier Error Correction using T-codes	A Formal Approach Enabling the Computation of Network State Permutations Using Binary Relations	
	Smita Vemulapalli, Monson Hayes	Darshika Perera, Kin Fun Li	Ulrich Speidel, Aaron Gulliver, Thokozani Shongwe	Martin Manderscheid, Falk Langer, Dirk Eilers	
3	Inferring Human Activity using Overcomplete Dictionary Based Pattern Recognition	Cloud Security Solutions using FPGA	Dynamic Preamble Scheduling and Detection for Cooperative Relay Networks	Denoising and Signal Detection for Pulse Position Modulation 60 GHz Impulse Radio based on Sparse Representation	
	Aaron Gulliver, Wei-Chuan Lin, Wei Li, Winston Seah	Joel-Ahmed Mondol	Wencheng Chen, Xiangming Wen, Le Yang, Wei Li, Aaron Gulliver	Aaron Gulliver, Hao Zhang, Chunlei Wu, Wei Li	
4		Design Rules for Implementing CORDIC on FPGAs	Performance Analysis of DCO OFDM and DCO WOFDM Systems in MMF Optical Links	Performance Comparison of Hierarchical Interconnection Networks	
		Dian-Marie Ross, Scott Miller, Mihai Sima, Curran Crawford	ANOUSH MIRBADIN, ABU BAKAR MOHAMMAD	Mostafa Abd-El-Barr, Turki Al-Somani	
5		A Tuneable CT BP Delta-Sigma Upconverter in CMOS 0.13um With Manchester Codec	Enhanced MIMO Detection with Parallel V-BLAST		
		Lijun Luo, Robert Sobot	Arsene Pankeu Yomi, Bruce Cockburn		

**University Club**

