2005 IEEE INTERNATIONAL CONFERENCE ON ELECTRO INFORMATION TECHNOLOGY (eit2005) TECHNICAL PROGRAM SUNDAY, MAY 22, 2005	
1:00-5:00 PM	**IEEE REGION 4 STUDENT PAPER CONTEST, KAUFMANN RESIDENCE HALL, UNIVERSITY OF NEBRASKA-LINCOLN**
2:00-5:00 PM	**REGISTRATION: EMBASSY SUITES HOTEL (CONFERENCE AREA)**
5:00-7:00 PM	**RECEPTION, SPONSORED BY UNL COLLEGE OF ENGINEERING AND TECHNOLOGY (EMBASSY SUITES HOTEL, Regents A Ballroom)**

2005 IEEE INTERNATIONAL CONFERENCE ON ELECTRO INFORMATION TECHNOLOGY (eit2005)

TECHNICAL PROGRAM

MONDAY, MAY 23, 2005

7:00-8:00	**SPEAKERS' BREAKFAST: (Colonial Room)**									
8:30-10:00	**M1: Opening Session: Welcome by Chancellor Perlman, Region 4 Director Ron Jensen, and eit Conference General Chair Hossein Mousavinezhad, Auditorium**									
	Keynote Speech by Brian Halla, CEO and President, National Semiconductor, "New Frontiers for Semiconductor Technology: On the Verge of a Boom", Auditorium									
10:00-10:30	**BREAK, Heritage 209**									
10:30-12:00	**M21: Special Session (Large Systems Issues), Chair: Nasir Memon, Regency 202**			**M22: Networks and Applications, Chair: (Byrav Ramamurthy), Regency 206**			**M23: Bioinformatics-1, Chair: (Jitender Deogun), Regency 207**			**M6: PROFESSIONAL TRACK , Project Management Workshop, Tarek Lahdhir, Lab Manager, General Motors Corporation, Warren, MI, Auditorium**
	Certification of Large Distributed Computations with Task Dependencies in Hostile Environments	A. W. Krings, J-L. Roch, S. Jafar	ID-IMAG, France	Incorporation of Sparse Priors in Long-Code Blind Multiuser Detection	D. Overbye	DeVry University, Oakbrook Terrace, IL	Modeling of the Biliary Tree Structure in MRCP Images	R. Logeswaran, C. Eswaran	Multimedia University, Cyberjaya, Malaysia	
	Hierarchical Clustering for Image Databases	S. K. Bhatia	University of Missouri - St. Louis	Teleoperated Robot Featuring Commercially Abailable Wireless Network Cards	E. Thompson, E. Harmison, R. Carper, R. Martin, J. Isaacs	Indiana University/Purdue University Fort Wayne	Performance Evaluation of 3-D Transforms for Medical Image Compression	R. S. Sunder, C. Eswaran, N. Sriraam	Multimedia University, Cyberjaya, Malaysia	
	Inversion Ranks for Lossless Compression of Color Pallette Images	Z. Arnavut, F. Sahin	SUNY, Fredonia, NY	Link Redundancy Based Connected Topologies in Ad-hoc Networks	G. Srivastava, P. Boustead, J. Chicharo	University of Wollongong, Australia	A 3-D Discrete Hartley Transform Coder for Compression of Magnetic Resonance Images	R. S. Sunder, C. Eswaran, N. Sriraam	Multimedia University, Cyberjaya, Malaysia	
	A Hierarchical Key Pre-distribution Scheme	M. Ramakumar, N. Memon, R. Simha	Polytechnic University, Brooklyn, NY	Energy Savings by Intelligent Interface Idling in 802.11 based Wireless Networks	S. Datta, S. Biswas,	Michigan State University, East Lansing	Business Objects as Part of a Preprocessing based Micro Array Data Analysis	D. P. F. Moeller	University of Hamburg, Germany	
	Arrival Rate Approximation by Nonnegative Cubic Splines	F. Alizadeh, J. Eckstein, N. Noyan, G. Rudolph	Rutgers University, Piscataway, NJ	Hierarchical Organization for Video Annotation	H. Li, S. Aahlt	North Dakota State University, Fargo, ND				
12:00-1:30	**LUNCH: LUNCHEON SPEAKER (Rich Sincovec, Chair, CSE Department, University of Nebraska-Lincoln, "Computing and Informatics: The Future Impact), Ballroom**									
1:30:3:00	**M31: Special Topics, Chair: S. Hossein Mousavinezhad, Regency 202**			**M32: Computer Networks, Chair: (TBA), Regency 206**			**M33: Power Engineering, Chair: (Neil Engleman), Regency 207**			**M6: PROFESSIONAL TRACK (Continued)**
	Wireless SAW Sensors Reader: Architecture and Design	S. Krishnamurthy, B. J. Bazuin, M. Z. Atashbar	Western Michigan University, Kalamazoo	Semi-Blind Adaptive Multiuser Detection For Asynchronous CDMA	S. Wang, S. G. Kim, L-H. Sun, H. Kim, S. W. Lee, S. R. Subramanya, K. Y. Kim, B.-K. Yi	LGE Mobile Research, San Diego, CA	Design and Implementation of a Non-Proprietary Campus Energy Management and Control System (EMCS)	S. Newbold, L. Agarwal	University of Nebraska - Lincoln	
	Identification of Acoustic Wave Modes in Piezoelectric Substrates	K. Haisch, M. Z. Atashbar, B. J. Bazuin	Western Michigan University, Kalamazoo	High-Throughput High-Performance MIMO-OFDM via Carrier Interferometry	P. Liang, C-G. Zhao, W. Wu	Beijing Univ. of Posts and Telecomm., China	A Monte Carlo Simulation Model for Reliability Evaluation of Transmission Systems	A. A. Chowdhury	MidAmerican Energy Company, Davenport, IA	
	Robust Beamforming for FDD Mobile Systems Over Rayleigh Fading Channels	L. Dong	Western Michigan University, Kalamazoo	Receiver Design for OCDMA Users in a Hybrid OCDMA/WDMA System	P-H. Chang, C-Y. Liao, J-R. Chen	National Dong Hwa University, Hualien, Taiwan	Distribution System Risk Assessment Based on Historical Reliability Performance	A. A. Chowdhury	MidAmerican Energy Company, Davenport, IA	
				Discontinuous Waveband Switching in WDM Optical Networks	B. Lekkala, B. Ramamurthy	University of Nebraska-Lincoln				
				Scalable Secure Multicasting with Distributed Key Management from Pairings	S-T Wu, J-H. Chiu, B-C. Chieu	National Ilan University, Taiwan				
3:00-3:30	**COFFEE BREAK, Heritage Room**									
3:30-4:30	**M41: INFORMATION TECHNOLOGY AND NEBRASKA INDUSTRY, Chair: John Woollam, Regency 207**									**M6: PROFESSIONAL TRACK (Continued)**
	J. A. Woolam Co.									
	Interactive Info R&D									
	Nebraska Center for Excellence									
4:30-6:15	**M51: Special Topic (Wireless Communications: 3G and Beyond), Chair: Peter Mueller, Regency 202**			**M52: Artificial Intelligence, Chair: (Suleiman Barada), Regency 206**			**M53: Signal Processing, Chair: (S. Hossein Mousavinezhad), Regency 207**			
	Simultaneous Mobility in Mobile IPv6	A. Dutta	Telcordia Technologies, Malaysia	ILMDA: An Intelligent Learning Materials Delivery Agent and Simulation	L-K. Soh, T. Blank, L. D. Miller, S. Person	University of Nebraska-Lincon	Maximum Likelihood Wavelet Fusion for Aerospace NDE Applications	M. Kumar, P. Ramuhalli	Michigan State University, East Lansing	
	Hierarchical System Synchronization and Signaling for High-Performance - Low-Latency Interconnects	P. Mueller, U. Bapst, R. Luijten	IBM Zurich Research Laboratory, Switzerland	Intelligent Collaborating Agents to Support Teaching and Learning	X. Zhang, L-K. Soh, X. Liu, H. Jiang	University of Nebraska-Lincoln	Harmonic Envelope Detection and Amplitude Estimation Using Map Seeking Circuits	B. J. Gregoire, R. C. Maher	Montana State University, Bozeman	
	Scalable Resource Allocation of Dynamic Multiple-Services For Next Generation Wireless Networks	S. Y. Tang, S. Thilakawarda, R. Tafazolli, Y. Qian	University of Puerto Rico at Mayaguez	K-means Clustering with Multiresolution Peak Detection	G. Yu, L-K. Soh, A. Bond	University of Nebraska-Lincoln	An Electromagnetic Acoustic Transduction Technique for Detecting Strut Fractures in Artificial Heart Valves	S. Ramakrishnan, N. V. Nair, R. Clifford, S. Majumdar, S. C. Chan, Y. Li, P. Ramuhalli, L. Udpa, S. S. Udpa	Michigan State University, East Lansing	
	Space-Time Diversity versus Feedback-Based Channel Adaptation in Cross-Layer Design of Wireless Networks	J. Tang, X. Zhang	Texas A&M University, College Station	Neural Network Based Approach for Tuning Kalman Filter	O. Korniyenko, M. S. Sharawi, D. N. Aloi	Oakland University, Rochester, MI	Photonic Band Gap with Coherently Controlled Defect Induced by a Nanoscale Structure	W. Li, S. M. Sadeghi	University of Wisconsin-Platteville	
	Impact of Wireless (Wi-Fi, WiMAX) on 3G and Next Generation – An Initial Assessment	F. Behmann	Freescale Semiconductor	Phase Unwrapping Using Vector Space Projection Methods	B. Marendic, H. Stark, Y. Yang	Motorola Inc, Schaumburg, IL				
	Joint Frame Synchronization and Carrier Frequency Offset Estimation in OFDM Systems	Z. Zhang, J. Liu, C. Wang, K. Sohraby, Y. Liu	NTT DoCoMo Research Lab in China, Beijing, China							

2005 IEEE INTERNATIONAL CONFERENCE ON ELECTRO INFORMATION TECHNOLOGY (eit2005)

TECHNICAL PROGRAM

TUESDAY, MAY 24, 2005

7:00-7:50	**SPEAKERS' BREAKFAST: (ROOM: Colonial Room)**									
8:00-9:15	**T1: KEYNOTE: INTRODUCTION & KEYNOTE: KIRSTIE BELLMAN: "CREATING THE NEW ANALYTIC FOUNDATIONS FOR TOMORROW'S SYSTEMS", Auditorium**									
9:15-10:15	**T2: INDUSTRIAL SESSION, Chair: Steve Cass, Nebraska Center for Excellence, Regency 207**									
	Megroup Company									
10:15-10:30	**BREAK, Heritage 209**									
10:30-12:00	**T31: Special Topics (Information and Intelligent Control Applications), Chair: Marcelo Algrain, Regency 202**			**T32: Wireless-2, Chair: Hamid Sharif, Regency 206**			**T33: Security, Chair: Kirstie Bellman, Regency 207**			**T6: PROFESSIONAL TRACK, 8:00 AM - 12:15 PM Dealing with Harmonic Distortion on the Distribution Systems Roger Dugan, EPRI PEAC, Auditorium**
	Implementation of a Fast Initial Position and Magnet Polarity Estimation for PM Synchronous Machines in Traction and	M. Harke, D. Raca, R. D. Lorenz, E. Schlevensky	University of Wisconsin - Madison	Improving Wireless Link Delivery Ratio Classification with Packet SNR	Y. Ma, Y. Yu, G-H. Lu, Z-L. Zhang	Honeywell International Inc., Minneapolis, MN	An Enhanced IPSec for Anonymous Internet Communication	C. Li, C. Yang	Ryerson University, Toronto, Ontario	
	Controlling an Electric Turbo Compound System for Exhaust Gas Energy Recovery in	M. C. Algrain	Caterpillar, Inc., Peoria, IL	Location Management & Handoff Protocol for Wireless ATM Networks	C. Kumar, R. Tripathi	IERT, Allahabad, India	ID-based Remote Authentication with Smart Cards on Open Distributed System from	S-T. Wu, J-H. Chiu, B-C. Chieu	National Ilan University, Taiwan	
	Electrical System Architecture and Controls for the Electrification of Heavy-Duty Trucks	K. W. Johnson	Caterpillar, Inc., Peoria, IL	A Mobility Based Link Layer Approach for Mobile Wireless Sensor Networks	P. Raviraj, H. Sharif, M. Hempel, S. Ci	University of Nebraska-Lincoln, Omaha	General Access Structures are Possible in Audio Cryptography	D. Socek, S.S. Magliveras	Florida Atlantic University, Boca Raton, FL	
	A Structural Health Monitoring System for Earth Moving Machines	W. Allen, J. Sundermeyer	Caterpillar, Inc., Peoria, IL	Energy Efficient Multi-Resolution Visual Surveillance on Wireless Sensor Networks	K. Veeraraghavan, D. Peng, H. Sharif	University of Nebraska-Lincoln	Anonymous Proof of Membership with Ring Signature	C-C. Chang, T. Hwang	National Cheng Kung University, Tainan, Taiwan	
12:00-1:30	**LUNCH: LUNCHEON SPEAKER (Dr. Charles Rubenstein, Pratt University), Ballroom**									
1:30-3:00	**T41: Special Topics (A Sampling of Research Challenges in Computer Security), CoChairs: Blaine Burnham and Jim Davis, Regency 202**			**T42: Software Engineering, Chair: (TBA), Regency 206**			**T43: Special Topics (Computer Networks), Chair: Mohammed Atiquzzaman, Regency 207**			**T6: PROFESSIONAL TRACK (Continued)**
	An Overview of Hard Research Problems in Computer Security	B. Burnham	University of Nebraska-Omaha	An Event-Based Framework for Model Integration	X. Jia, A. Steele, L. Qin, H. Liu, C. Jones	DePaul University, Chicago, IL	Load Balanced Routing Protocol for Inter-Vehicle Communications	A. Durresi, M. Durresi	Louisiana State University, Lafayette	
	Network Forensics Systems	T. Daniels	Iowa State University, Ames	An Automated Design Tool Based on Scenarios	H. Reza, D. Jurgens, J. White, J. Anderson, J. Peterson	University of North Dakota, Grand Forks	An Infrastructureless End-to-End High Performance Mobility Protocol for Connection Oriented Applications using Interactive Transparent Networking	S. Davu, R. Y. Zaghal, J. I. Khan	Kent State University, Kent, OH	
	Design of a Test-bed Network for Security Research	D. Jacobson	Iowa State University, Ames	Optimize Defect Detection Techiniques through Empirical Software Engineering	H. T. Sun	IBM, Rochester, MN	Buffer Requirements at ECN-capable RED Gateways to Minimize Packet Losses	H. Bai, D. Lilja	Honeywell Labs, Minneapolis, MN	
	Information Assurance Research at Mississippi State University	R. Vaughn	Mississippi State University, Starkville				Performance of DNS as a Location Manager for Mobile Networks	A. S. Reaz, S. Fu, M. Atiquzzaman	University of Oklahoma-Norman	
	MEMS Based Computed Tomographic Scanner for Border Security	K. Arunachalam, L. Udpa, S.S. Udpa	Michigan State University, East Lansing				Analysis of A Highly Available Cluster Architecture	A. George, S. Ganesan	Oakland University, Rochester, MI	
3:00-3:30	**COFFEE BREAK, Heritage 209**									
3:30-5:30	**T51: Embedded Circuits and Systems, Chair: Dietmar Moeller, Regency 202**			**T52: Computer Systems, Chair: (Haitao Sun), Regency 206**			**T53: Computer Vision & Image Processing, Chair: (TBA), Regency 207**			**T6: PROFESSIONAL TRACK (Continued)**
	An Adaptive Analog-to-Digital Converter Based on Low-Power Dynamic Latch Comparator	Z. Huang, P. Zhong	Michigan State University, East Lansing	A Distributed Processing Network Architecture for Reconfigurable Computing	F. M. Vallina, E. Orukulu, J. Saniie	Illinois Institute of Technology, Chicago	Scalable Multiresolution Image Segmentation	F. A. Tab,G. Naghdy, A. Mertins	University of Wollongong, Australia	
	Effects of Parameter Variations on Timing Characteristics of Clocked Registers	P. R. Gada, W. R. Roberts, D. Velenis	Illinois Institute of Technology, Chicago	Theft-Induced Checkpointing for Reconfigurable Dataflow Applications	S. Jafar, A. W. Krings, T. Gautier, J-L. Roch	ID-IMAG, France	Computer Assisted Visual Interactive Recognition (CAVIAR) Technology	A. Evans, J. Sikorski, P. Thomas, S-H. Cha, C. Tappert, J. Zou, A. Gattani, G. Nagy	Rensselaer Polytechnic Institute, Troy, NY	
	Carry-Save and Binary Sign-Digit Representations Conversion	G. Wang	Indiana University Purdue University, Fort Wayne	A Survey of Data Protection Technologies	C-Y. Chang	Network Appliance Inc., Sunnyvale, CA	Restoration of Comprehensive Two-Dimensional Gas Chromatography Images	J. Shi, S. E. Reichenbach	University of Nebraska-Lincoln	
	Energy Macro-Modeling of Embedded Microprocessor Using SystemC	J. Xi, Z. Huang, P. Zhong	Michigan State University, East Lansing	Performance Analysis of Two Frozen Image Based Backup/Restore Methods	C-Y. Chang, Y-C. Chu, R. Taylor	Network Appliance Inc., Sunnyvale, CA	Automated Unmixing of Comprehensive Two-Dimensional Chemical Separations with Mass Spectrometry	M. Chen, S. E. Reichenbach, J. Shi	University of Nebraska-Lincoln	
	The Efficient Implementation of An Array Multiplier	G. Wang	Indiana University Purdue University, Fort Wayne	Quantitative performance evaluation of high-end computing platforms	K. Veeraraghavan, H. Sharif, A. Nicoll, H. Ali	University of Nebraska - Lincoln	Hand gesture selection and recognition for visual-based human-machine interface	A. Chalechale, F. Safaei, G. Naghdy, P. Premaratne	University of Wollongong, Australia	
	Delay Modeling using Ramp and Realistic Signal Waveforms	R. Gandhi, J. Shiffer, D. Gandhi, D. Velenis	Illinois Institute of Technology, Chicago				Multi-Channel Texture Classification applied for Feature Extraction in Forestry	C. Koerber, D. P. F. Moeller, C. Katsch	University of Hamburg, Germany	
5:30-6:00	**FREE TIME**									
6:30-9:30	**SOCIAL HOUR AND CONFERENCE BANQUET (Sponsored by Lincoln Electric System, Nebraska Public Power District, and Omaha Public Power District), Lincoln Country Club**									

2005 IEEE INTERNATIONAL CONFERENCE ON ELECTRO INFORMATION TECHNOLOGY (eit2005)

TECHNICAL PROGRAM

WEDNESDAY, MAY 25, 2005

7:00-8:00	**SPEAKERS' BREAKFAST: (ROOM: Colonial Room)**									
8:00-10:00	**W11: Educational and Other Applications, Chair: (Rob Maher), Regency 202**			**W12: Bioinformatics-2, Chair: (Etsuki Moriyama), Regency 206**			**W13: Web Applications, Chair: (TBA), Regency 207**			**W3: PROFESSIONAL TRACK, 8:30-2:00 PM Leadership Development for Engineers at the workplace. Charles Rubenstein, Pratt University, Auditorium**
	Multimedia Access Platform for Virtual Learning Environment	A. Dong, H. Li	North Dakota State University, Fargo, ND	Using Databases and Computational Techniques to Infer the Function of Novel Proteins	V. Ramanathan, K. Mercier, R. Powers, P. Revesz	University of Nebraska-Lincoln	Data Mining Application in Designing Popular and Optimal Travel Packages	B. Al-salim	University of Nebraska-Lincoln	
	Using LabVIEW Software for a Fire and Alarm Technology Lab	H. Franz	University of Houston, TX	A Computational Approach for Gene Assembly and Exon Annotation Based on BLAST	X. Deng, H. Ali	University of Nebraska at Omaha	Web Services for Designing Small-scale Web Applications	K. Dezhgosha, S. Angara	University of Illinois at Springfield	
	An Interactive Grading and Learning System for Chinese Calligraphy	C-H. Chou, C-S. Wu, C-C. Han	National United University, Miaoli, Taiwan	Mining Gene Microarray Data with Adaptive Feature Scaling	H. Geng, X. Deng, H. Ali	University of Nebraska Medical Center, Omaha, NE	Two Approaches to Improve Java MIDP Record Management System in Wireless Devices	H. Kimm, S. Y. Shin, C. Shim	South Dakota State University, Brookings, SD	
	Expert Witness: A Computer Science Emphasis	A. Coleman, D.Dampier	Mississippi State University				Prasan Bit Position Match Error Concealment Model with Inverse Relationship Between Motion	K. Prasanna	PSG College of Technology, India	
	An Intelligent Survey Framework Using the Life Events Calendar	J. Kite, L-K. Soh	University of Nebraska - Lincoln				An strategy to share data among multi-platforms process information systems	A. S. Lopez, A. E. Reza, J. M. S. Jurado	Instituto de Investigaciones Electricas, Cuernavaca, México	
10:00-10:30	**COFFEE BREAK, Heritage 209**									
10:30-12:00	**W21: Special Session (Localization in Wireless Sensor Networks), CoChairs: Lance Perez and Steven Goddard, Regency 202**			**W22: Networking & Security, Chair: (TBA), Regency 206**			**W23: Special Session (Bioinformatics), Chair: Khalid Sayood, Regency 207**			**W3: PROFESSIONAL TRACK (Continued)**
	Self-stabilizing Pursuer-Evader Tracking in Wireless Sensor Networks	M. Demirbas	Massachusetts Institute of Technology, Boston	Ground Water Monitoring Using Smart Sensors	S. Anumalla, B. Ramamurthy, D. C. Gosselin, M. Murbach	University of Nebraska - Lincoln	Identification of Pathogenic Fungi Us	D. R. Bastola, P. C. Iwen, S. H. Hinrichs, S. H. Chandio	University of Nebraska Medical Center, Omaha	
	2-D Location of Human Archetypes using the Cricket System	S. Das, C. Gleason, S. Shen, S. Goddard, L. C. Perez	University of Nebraska-Lincoln	A Generic Quality of Service Management Model for Nertwork-aware Applications	P. Bhattarakosol, W. Srisujjalertwaja	Chualongkorn University, Thailand	Significance analysis of clustering hig	H. H. Otu, S. Kolia, J. Jones, O. Osman, T. A. Libermann	Harvard Medical School, Boston, MA	
	An Overview of Localization Algorithms in Disconnected Wireless Sensor Networks	S. Shen, C. Gleason	University of Nebraska-Lincoln	Performance Analysis of Multiuser Power Control Algorithms for VDSL	A. Rashdi, N. M. Sheikh, A. U. H. Sheikh	UET, Lahore, Pakistan	Imposed Constraints on the Smith-W	P. G. Humphrey, G. R. Bashford	LICOR, Inc. Lincoln, NE	
	A Study of Measurement Error in 2-D Localization using the Cricket System	C. Gleason, S. Shen, S. Das	University of Nebraska-Lincoln	A Proportional Rate-based Control for Active Queue Management	C-L. Chen,J-C. Yu	National Pingtung Institute of Commerce, Taiwan	A Genome Signature Based on Mark	J. Li, K. Sayood	University of Nebraska-Lincoln	
	Integration of Wireless Localization and Environmental Control Systems	S. Pump, G. Henze, L. C. Perez, S. Goddard	University of Nebraska-Lincoln	Frequency Domain Real Time Digital Image Watermarking	R. Shah, A. Agarwal, S. Ganesan	Oakland University, Rochester, MI				
12:00-1:30	**LUNCH: (ROOM: TBA)**									
1:30-2:30	**Selection of the Best-Paper Award**									
2:30-3:00	**Best Paper Award Presentation and Concluding Remarks**									