

# 2008 IEEE Region 5: P-BASICS<sup>2</sup> Technical, Professional & Student Conference

## Conference Opening Ceremony

Friday, April 18, 2008

8:30 a.m. – 10:00 a.m.

Rooftop Ballroom, Intercontinental Hotel at Plaza, Kansas City

**Ghulam M Chaudhry, Conference Chair, Welcome**

**Gail Hackett, Provost and Vice-Chancellor for Academic Affairs, UMKC**

**Walter Rychlewski, Interim Dean, School of Computing & Engineering, UMKC**

**David Pierce, Director, IEEE Region 5**

**John Fessler, Chair, IEEE-KC Section**

**Guest Speaker: Fahim Siddiqui**

**Executive Vice President in-Charge of Product**

**Management, Development and Operations at IntraLinks, Inc.**

**Topic: Software as a Service: Confluence of Enterprise Software and Telecommunications**

## Coffee Break at Pavilion Prefunction

## Technical Program (Friday, April 18, 2008)

Paper #	Paper Title	Authors	Time	Room	Session	Session Chair
P-1	Optimization of Construction of Linear Switched Reluctance Motor with Transverse Magnetic Flux	Xinglong Li; Ernest Mendrela	10:30 a.m. - 12:00 p.m.	Pavilion II	Power I	Prof. Kevin Kirkpatrick, CSEE, University of Missouri-Kansas City
P-2	Modeling of Unshielded Suspended and Inverted Substrate Microstrip Lines	Sarhan Musa; Matthew Sadiku				
P-3	Robust $H_{\infty}$ Control Design Using $\mu$ -Synthesis for a Boiler-Turbine Unit	Mahdi Salehi; Ali Akbar Afzalian				
P-4	Electromagnetic Radiation Study of Commercial Cellular Phones with a TEM Cell for Biological Applications	Nattaphong Boriraksantikul; Phumin Kirawanich; Naz Islam	10:30 a.m. - 12:00 p.m.	Pavilion I	Biotechnology I	Prof. Reza Derakhshani, CSEE, University of Missouri-Kansas City
P-5	Enhancing Brain by Transforming Human to Transhuman : Vision & Possibilities	Jivika Govil				
P-6	Modelling The Cellular Level of Natural Sensing With The Functional Basis For The Design of Biomimetic Sensor Technology	Jacquelyn Stroble; Steve Watkins; Robert Stone; Daniel McAdams; Li Shu				
P-7	A Neural Network Demand Prediction Scheme for Resource Allocation in Cellular Wireless Systems	Piyush Sandhir; Kenneth Mitchell	10:30 a.m. - 12:00 p.m.	Pavilion V	Systems & Networking I	Prof. Kenneth Mitchell, CSEE, University of Missouri-Kansas City
P-8	Light Weight Anti-Phishing with User Whitelisting in a Web Browser	Yue Wang, Baek-Young Choi				
P-9	Signal Strength Analysis for Optimal Routing in Wireless Sensor Networks	Lucas Vespa; Keqian Mei; Rapeepan Maitree; Ning Weng				
P-10	Performance of a Quaternary Logic Design	Mahsa Dornajafi; Steve Watkins; Benjanmin Cooper; Michael Bales	10:30 a.m. - 12:00 p.m.	Pavilion III	Computer & VLSI I	Prof. Waleed Al-Assadi, ECE, Missouri University of Science and Technology
P-11	Modeling Substrate Noise Effects in Dynamic CMOS Circuits	Waleed Al-Assadi; Sasikiran Burugapalli				
P-12	Impact of Self-Heating on Frequency Response of Current Mirrors in Bipolar Technology	Kamal Sinha; Ronald Carter; Howard Russell Jr.; Wendell Davis				
Box Lunch at Pavilion Prefunction & Speaker Prof. James. E. Stine, Oklahoma State University, "45 nm System on Chip Design"						
P-13	Designing of Shielded Two Coupled Striplines with Finite Element Method	Sarhan Musa; Matthew Sadiku	1:00 p.m. - 2:30 p.m.	Pavilion II	Power II	Prof. Edward Ronan, CSEE, University of Missouri-Kansas City
P-14	Computation of Capacitance of Shielded and Coupled Transmission Lines	Sarhan Musa; Matthew Sadiku				
P-15	Quantifying Prosthesis Control Improvements Using a Vibrotactile Representation of Grip Force	Pravin Chaubey; Aniruddha Chatterjee; Jay Martin; Nitish Thakor				

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Paper #	Paper Title	Authors	Time	Room	Session	Session Chair
P-16	<i>A Brief Intruduction of Feature Matching</i>	Dianchao Liu	1:00 p.m. - 2:30 p.m.	Pavilion I	Informatics	Prof. Yugyung Lee, CSEE, University of Missouri-Kansas City
P-17	<i>Genetic Programming Lab (GPLab) Tool Set, Version 3.0</i>	Edward William; James Northern				
P-18	<i>Automatic Fluorescent Dot Counting In Interphase cell Nuclei Using Basis Pursuit Image Analysis</i>	Zhenfei Tai; Samuel Cheng				
P-19	<i>UAV Autopilot Integration and Testing</i>	David Erdos; Steve Watkins	1:00 p.m. - 2:30 p.m.	Pavilion V	Avionics	Prof. Cecil Stuerke, EET, Devry University
P-20	<i>A novel expanded 16-dimensional Q2PSK constellation</i>	Milton Quinteros; Kenneth Cartwright; Edit Kaminsky Bourgeois; Ricardo Gallegos				
P-21	<i>Improving the Bandwidth of U-slot Microstrip Antenna Using a New Technique (Trough-Slot Patch)</i>	Mahmoud Mahmoud				
P-22	<i>Thermal Effects in Current Feedback Operational Amplifiers in Bipolar Technology</i>	Kamal Sinha; Xuesong Xie; Ronald Carter; Wendell Davis; Howard Russell Jr.	1:00 p.m. - 2:30 p.m.	Pavilion III	Computer & VLSI II	Prof. W. Daniel Leon-Salas, CSEE, University of Missouri-Kansas City
P-23	<i>Design of Sinusoidal, Triangular, and Square wave Generator Using Current Feedback Operational Amplifier (CFOA)</i>	AKM Haque; Md Hossain; Wendell Davis; Howard Russell Jr.; Ronald Carter				
P-24	<i>A Fundamentally Secure Payment Device Interfaced to Regular PCs</i>	Abdelhafid Bouhraoua; Metub Al Shammari				
Coffee Break at Pavilion Prefunction						
P-25	<i>Bluetooth Clock Recovery and Hop Sequence Synchronization Using Software Defined Radios</i>	Ahmad Tabassam; Stefan Heiss	3:00 p.m. - 5:00 p.m.	Pavilion II	Software & Modeling	Prof. Waleed Al-Assadi, ECE, Missouri University of Science and Technology
P-26	<i>A General Evaluation Criteria for Web Applications Maintainability Models</i>	Emad Ghosheh				
P-27	<i>A Fast and Efficient Frequency-Domain Method for Convolution Blind Source Separation</i>	Peng Xie; Steven Grant				
P-28	<i>Automated Battery Tester Data Acquisition System Using LabVIEW</i>	Marcus Lockhart; Latatiana Clabon; Christopher Lott; Miktoша James; James Northern; Warsame Ali				
P-29	<i>Design of a Configurable ATR System Using Matlab</i>	Eric Wright; James Northern	3:00 p.m. - 5:00 p.m.	Pavilion I	Computer & VLSI III	Prof. Deb Chatterjee, CSEE, University of Missouri-Kansas City
P-30	<i>Enclosed Layout Transistor with Active Region Cutout</i>	Shuza Binzaid; John Attia				
P-31	<i>FPGA Implementation of an 8-bit Simple Processor</i>	Eric Ayeh; Yasuhiro Morita; Kodzo Agbedanu; Oluwayomi Adamo; Parthasarathy Guturu				
P-32	<i>Numerical Computation of the Radiated Fields from a Thin Wire Dipole</i>	Shaun Walker				
P-33	<i>Robustness of Distance Relay with Mho Characteristic against Inter Phase Faults Resistance</i>	Hossein Shateri; Sadegh Jamali	3:00 p.m. - 5:00 p.m.	Pavilion V	Power III	Prof. Kevin Kirkpatrick, CSEE, University of Missouri-Kansas City
P-34	<i>Voltage Inversion due to TCSC Presence on Second Circuit of Double Circuit Line and Distance Relay Mal-Operation Considering MOV Operation</i>	Sadegh Jamali; Ahad Kazemi; Hossein Shateri				
P-35	<i>Distance Relay Mal-Operation due to Presence of SSSC on Adjacent Lines in Inter Phase Faults</i>	Ahad Kazemi; Sadegh Jamali; Hossein Shateri				
P-36	<i>On-Site Wind Energy Measurement and Preliminary Transmission Assessment: Case Studies in Wyoming</i>	Kala Meah; A. H. M. Sadrul Ula				
P-37	<i>Characterizing Power and Resource Consumption of Encryption/Decryption in Portable Devices</i>	Benfano Soewito; Lucas Vespa; Ning Weng	3:00 p.m. - 5:00 p.m.	Pavilion III	Security	Prof. Omar Elkeelany, ECE, Tennessee Tech. University
P-38	<i>Secured Hardware Design – An Overview</i>	Waleed Al-Assadi; Sasikiran Burugapalli				
P-39	<i>High Performance Fast Multiplier</i>	Ghulam Chaudhry; Fekri Kharbash				
P-40	<i>Verification of Dynamic Separation of Duty Policy for Role-based Business Processes</i>	Aashay Thipse				
P-41	<i>Effect of Loop-Unrolling in Hardware Reconfigurable Implementations of RC5-192 Encryption Algorithm</i>	Omar Elkeelany; Suman Nimmagadda				
Conference Welcome Reception			6:00 p.m - 8:00 p.m	Rooftop Ballroom		

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## Technical Program (Saturday, April 19, 2008)

Paper #	Paper Title	Authors	Time	Room	Session	Session Chair
P-42	Fast Template Matching System Using VHDL	Richard Tate; James Northern	9:00 a.m. - 10:00 a.m. Coffee Break 10:15 a.m. - 11:30 a.m.	Pavilion II	Systems & Networking II	Prof. Driss Benhaddou, EE, University of Houston
P-43	Pre-processing for Improved Query Routing in Super-peer P2P Systems	Rozlina Mohamed; Christopher Buckingham				
P-44	Demonstration of Principal Component Analysis on TI-86	Cecil Stuerke				
P-45	Design And Implementation Of Ground Penetration Radar System Using Coded Sequences And Improved Target Detection Using Golay Codes	Habeeb Ur Rahman Mohammed				
P-46	Design and Analysis of an Improved Translinear Floating Resistor for a Variable Gain Amplifier	Suman Chakrabarty Bhola; Howard T. Russell Jr.; Ronald L. Carter; W. Alan Davis; AKM S Haque				
P-47	A Comparative Study of Linear and Nonlinear Data-Driven Surrogate Models of Human Joints	Jesse Sherwood; Reza Derakhshani	9:00 a.m. - 10:00 a.m. Coffee Break 10:15 a.m. - 11:30 a.m.	Pavilion V	Biotechnology II	Prof. Appie Van de Liefvoort, CSEE, University of Missouri-Kansas City
P-48	Remote Healthcare Monitoring System Architecture using Sensor Networks	Driss Benhaddou; Manikanden Balakrishnan; Xiaojing Yuan				
P-49	Classification of Imagined Motor Tasks for Brain-Computer-Interface	Plamen Doynov; Jesse Sherwood; Reza Derakhshani				
P-50	Low Resolution Technique for Fast Identification of Carotid Artery in Computed Tomography	Cecil Stuerke				
P-51	An Insight into Swarm Intelligence for adapting to Business and Technology	Jivika Govil				
P-52	Testing of Asynchronous NULL Conventional Logic (NCL) Circuits	Waleed Al-Assadi	9:00 a.m. - 10:00 a.m. Coffee Break 10:15 a.m. - 11:30 a.m.	Pavilion VI	Computer & VLSI IV	Prof. Steve Watkins, ECE, Missouri University of Science and Technology
P-53	Design and FPGA Prototyping of a Flood Prediction System	Waleed Al-Assadi; Sahra Sedigh				
P-54	Design of FPGA Configuration Logic Block Utilizing Asynchronous Static Null Conventional Logic (NCL)	Waleed Al-Assadi; Scott Smith; Indira Dugganapally				
P-55	Design of VBE Referenced Bootstrap Current Source, Sensitivity, and Self-Heating Effect	Md Hossain; Wendell Davis; Howard Russell Jr.; Ronald Carter				
P-56	Design of FPGA Configuration Logic Block Using Asynchronous Semi-Static Null Convention Logic (NCL) Circuits	Waleed Al-Assadi; Scott Smith; Vijay Pillai				
Conference Plated Lunch at Rooftop Ballroom & Speaker Prof. Donald Wuensch, Missouri University of Science & Technology , "Clustering"						
Conference Award Banquet			6:00 p.m - 9:00 p.m	Ballroom		