

2008 IEEE Long Island Systems, Applications and Technology Conference

**Farmingdale, NY
2 May 2008**



**IEEE Catalog Number:
ISBN 13:**

**CFP08601-PRT
978-1-4244-1731-5**

Table of Contents

A Physical Layer Open Architecture for Communications Systems Integration: Common Baseband Processor with Multiple-Access Adaptively Steered Antenna Array	1
<i>David K. Mesecher</i>	
Understanding the Implications of the Patent Reform Act of 2007	11
<i>Steven Rubin</i>	
Multi-mission Phased Array Radar (MPAR) National Radar R&D Project	16
<i>John Heimmer</i>	
Plug-in Hybrid Vehicles: An Overview and Performance Analysis	18
<i>Praveen Anumolu, Greg Banhazl, Theodore Hilgeman and Ronald Pirich</i>	
Management of Specialized Mobile Computers in the Enterprise with Special Consideration to thin Clients, Abstraction and the Physical Security of the System	22
<i>Thomas K. Roslak and Venkataswamy Raju</i>	
NYIT Greenprint Transportation Solution	23
<i>Daniel Rapka</i>	
Software Implementation and Performance Analysis of the LTE Physical Layer Blocks on a Next Generation Baseband Processor Platform	25
<i>Babak D. Beheshti</i>	
North American Digital TV - OTA-ATSC, Cable-QAM & Internet TV	26
<i>Bruce Willins</i>	
A Framework for Computer Forensics Investigations Involving Microsoft Vista	27
<i>Darren R. Hayes and Shareq Qureshi</i>	
Virtual Instrumentation for Test, Control, and Design	34
<i>Robert Berger</i>	
On the Fast Generation of Long-period Pseudorandom Number Sequences	36
<i>Ishaan L. Dalal, Jared Harwayne-Gidansky and Deian Stefan</i>	
A Middleware Framework for External Sensor Systems	45
<i>Hubert H. Chin, Avinash A. Rawana, and Edward J. Martin</i>	
The Challenge of Testing Digital RF Technologies	47
<i>Alan Wolke</i>	
Electromagnetic Environmental Effects Modeling, Simulation & Test Validation for Cosite Mitigation - An Overview	48
<i>Ronald Pirich, Carrol Basanez and Praveen Anumolu</i>	
Modeling Laterally-Contacted nipi-Diode Radioisotope Batteries	54
<i>Cory D. Cress, Brian J. Landi and Ryne P. Raffaele</i>	
Characterization Studies on PEM Metallic Bipolar Plates and Membrane Electrode Assembly	62
<i>Y. Hung, Hazem Tawfik and Devinder Mahajan</i>	
Visualization Solutions in four Dimensions	67
<i>Robert Balfour and Richard Balfour</i>	