(SUBJECT TO CHANGE)

ITNG 2009
ADVANCE PROGRAM

The International Conference on Information Technology: New Generations
April 26-29, 2009
The Orleans' Hotel & Casino, Las Vegas, Nevada, USA

April 26, 2009 - SUNDAY

6:00pm - 8:30pm: REGISTRATION (Second Floor, Conference Section)
6:00pm - 8:00pm: PRECONFERENCE RECEPTION

April 27, 2009 - MONDAY

7:00am - 8:00pm: REGISTRATION (Second Floor, Conference Section)
7:00am - 8:00am: CONTINENTAL BREAKFAST
8:00am - 8:10am: Conference Opening Remarks by
  Dr. Shahram Latifi, ITNG Chair, Professor, University of Nevada, Las Vegas

8:10am - 9:00am: Keynote by Dr. Fred Harris, Professor, UNR, USA
  "Neo Cortical Simulation: Hardware, Software, and Future Directions"

9:00am - 9:10am: BREAK

PARALLEL SESSIONS:

A SESSIONS (Salon C&D)

SESSION MA1: CIRCUIT & SYSTEM DESIGN I

CHAIR: Dr. Fei Wang, California State University, Long Beach, USA
Co-CHAIR:

9:10am - 10:10am

9:10-9:30  Design Simulation of Top ITO Gratings to Improve Light Transmission for Gallium Nitride LEDs
  Xiaomin Jin, Simeon Trieu, Fei Wang, Bei Zhang, Tai Dai, XiangNing Kang and Guoyi Zhang

9:30- 9:50  Non-volatile Memory Devices Based on Chalcogenide Materials
  Fei Wang and Xiaolong Wu

9:50-10:10  Dedicated hardware for Ant Colony Optimization using Distributed Memory
  Masaya Yoshikawa and Hidekazu Terai

10:10-10:30  Coffee Break
SESSION MA2: CIRCUIT & SYSTEM DESIGN II

CHAIR: Dr. Shaharuddin Salleh, Universiti Teknologi Malaysia, Malaysia
Co-CHAIR: Dr. Faruk Yildiz, Sam Houston State University

10:30am - 12:30pm

10:30-10:50 A Novel Flash Fast-Locking Digital Phase-Locked Loop
Mahmoud Wagdy

10:50-11:10 Dynamic Single-Row Routing Technique for Channel Assignments
Shaharuddin Salleh and Nor Haniza Sarmin

11:10-11:30 Using a Supercapacitor to Power Wireless Nodes from a low power source such as a 3V button battery
Pierre Mars and Dave McIntosh

11:30-11:50 Implementation of Different Function Units Using Flexible and Reconfigurable Architecture
Hwang Chao-Jang and Lin Chih-Tung

11:50-12:10 Low Power Energy Harvesting, Conversion, and Storage Circuits
Faruk Yildiz

12:10-12:30 Processor Allocation Problem for NoC-based Chip Multiprocessors
Dawid Zydek and Henry Selvaraj

12:30-12:50 Lunch (On Your Own)

SESSION MA3: INFORMATION SYSTEMS & INTERNET TECHNOLOGY

CHAIR: Dr. Narayan Debnath, Winona State University, USA
Co-CHAIR:

1:30pm - 4:30pm

1:30-1:50 A Further Improvement on a Modified Genetic Algorithm
Ian Stewart, Wenying Feng and Selim Akl

1:50-2:10 Generating Rule-based Executable Process Models for Service Outsourcing
Jae-Yoon Jung

2:10-2:30 Integrating Amazonic Heterogeneous Hydrometeorological Databases
Glaucia Braga e Silva, Breno Lisi Romano, Henrique Fernandes de Campos, Ricardo Godoi Vieira, Adilson Marques da Cunha and Luiz Alberto Vieira Dia

2:30-2:50 What have we learned from a literal survey of Web Applications Testing?
Ben Kam and Thomas R. Dean

2:50-3:10 Formalizing the Management Automation with Workflow of Software Development Process based on the SPEM Activities view
D. Riesco, Narayan Debnath, G. Montejano and M. Perez Cota
3:10-3:30 SOFTWARE PROJECTS FINANCE SUPPORT: Preliminary talks between software project managers and potential investors
R. Uzal, G. Montejano, G. D. Riesco and Narayan Debnath

3:30 - 3:50 Scheduling Algorithm for On-demand Bus System
Kota Tsubouchi, Kazuo Hiekata and Hiroyuki Yamato

3:50 - 4:10 A New Algorithm for Frequent Itemset Generation in Non- Binary Search Space
G Praveen Kumar, Anirban Sarkar and Narayan Debnath

4:10 - 4:30 OPEN SLOT

4:30 - 5:00 Coffee Break

SESSION MA4: SOCIAL COMPUTING & TECHNOLOGY
CHAIR: Dr. Savae Latu, Unitec New Zealand, New Zealand
CO-CHAIR: Dr. Timothy O'Keefe, University of North Dakota, USA
5:00 pm – 8:00pm

5:00-5:20 Querying Semistructured Data with Compression in Distributed Environments
B.M. Monjurul Alom, Frans Henskens and Michael Hannaford

5:20-5:40 Multidimensional Visualization System for Travel Social Networks
Maria Chiara Caschera, Fernando Ferri, Patrizia Grifoni and Tiziana Guzzo

5:40-6:00 A Mobile Application to Support Phatic Communication in the Hybrid Space
Mark Bilandzic, Daniel Filonik, Michael Gross, Andreas Hackel, Herbert Mangesius and Helmut Krcmar

6:00-6:20 A Trend Analysis of the Question Answering Domain
Mohan John Blooma, Alton Yeow Kuan Chua and Dion Hoe-Lian Goh

6:20-6:40 Effects of Social Approval Votes on Search Performance
Gabriella Kazai and Natasa Milic-Frayling

6:40-7:00 Trust Computing for Social Networking
Yanjun Zuo, Wen-Chen Hu, Timothy O'Keefe

7:00-7:20 Towards a Context Aware Mobile Community Application Platform
Christian Menkens

7:20-7:40 Giving Every Child a Sense of Belonging: Improving Birth Registration in Developing Countries
Johannes Gambo and Savae Latu

7:40-8:00 Planning and Realization of Collaborative Assembly
Hao Yongping, Wang Jingyu, Zeng Pengfei and Shao Weiping

B SESSIONS (Salon B&E)

SESSION MB1: AGILE METHODS, TOOLS & BEST PRACTICES
CHAIR: Dr. Kazuo Hiekata, University of Tokyo, Japan
Co-CHAIR:
SESSION MB2: SOFTWARE ENGINEERING I

CHAIR: Dr. Chris Lüer, Ball State University, USA
Co-CHAIR:

10:30am – 1:10pm

10:30-10:50 Applying a Composite Process Framework (CPF) in Real Life Software Development Project
Mohammed Al-Maharmeh and Bhuvan Unhelkar

10:50-11:10 Fixed Broadband Wireless Access For Wide Area Coverage and Last Mile Solutions
Son Le-Ngoc and Bao Le Nguyen

11:10-11:30 Managing Post-Development Fault Removal
Suzanna Schmeelk, William Mills and Robert Noonan

11:30-11:50 TransCPN - Software Tool for Transformation of Colored Petri Nets
Boleslaw Mikolajczak and Abhishek Singh

Hakun Lee and Kaneko Keiichi

12:10-12:30 An Aspect-Based Approach to Checking Design Constraints at Run-time
Yoonsik Cheon, Carmen Avila, Steve Roach, CuahTEMOC Munoz, Neith Estrada, Valeria Fierro and Jessica Romo

12:30-12:50 Evaluating Test-Driven Development in an Industry-sponsored Capstone Project
John Vu, Niklas Frojd, Clay Shenkel-Therolf and David Janzen

12:50-1:10 Security Vulnerabilities and Mitigation Strategies for Application Development
Brunil D. Romero M. and Hisham M. Haddad

1:10-1:30 Lunch (On Your Own)

SESSION MB3: SOFTWARE ENGINEERING II

CHAIR: Dr. JDM Kinyua, Central University of Technology, South Africa
Co-CHAIR:
1:30pm - 4:30pm

1:30-1:50  An Agent-Oriented Source-Level Debugger on Top of a Monitoring Framework  
Ziad Al-Sharif and Clinton Jeffer

1:50-2:10  Component-based Software Architecture Design for Network Intrusion Detection and Prevention System  
Jianchao Han, Mohsen Beheshti and Kazimierz Kowalski

2:10-2:30  Clustering and Metrics Thresholds Based Software Fault Prediction of Unlabeled Program Modules  
Cagatay Catal, Ugur Sevim and Banu Diri

2:30-2:50  Software Engineering Challenges in Game Development  
Christopher Kanode and Hisham Haddad

2:50-3:10  On the Discovery of Candidate Aspects in Software Requirements  
Haitham Hamza and Dina Darwish

3:10-3:30  Early Studies in Acquiring Evidentiary, Reusable Business Process Models from Laws for Legal Compliance  
Travis Breaux and Calvin Powers

3:30-3:50  Citation Analysis: An Approach for Facilitating the Understanding and the Analysis of Regulatory Compliance Documents  
Mohammad Hamdaqa and Abdelwahab Hamou-Lhdaj

3:50-4:10  An Eclipse Plugin for the Automated Reverse-Engineering of Software Programs  
philippe dugerdil, david kony and javier belmonte

4:10-4:25  A Framework for Identifying Reusable Software Components Using Formal Concept Analysis  
Haitham Hamza

4:25-4:40  OPEN SLOT

4:40-5:00  Coffee Break

SESSION MB4: SERVICE-ORIENTED COMPUTING & APPLICATIONS

CHAIR: Dr. JDM Kinyua, Central University of Technology, South Africa  
Co-CHAIR: Dr. Luis Ferreira Pires, University of Twente, Netherlands

5:00pm – 8:00pm

5:00-5:20  Cross-Organizational Service Evolution Management  
Odorico von Susani and Philippe Dugerdil

5:20-5:40  Highly-Available Web Service Community  
Sattanathan Subramanian

5:40-6:00  Towards a Goal-Based Service Framework for Dynamic Service Discovery and Composition  
Luiz Olavo Bonino da Silva Santos, Eduardo Goncalves da Silva, Luis Ferreira Pires and Marten van Sinderen
6:00-6:20  Obstacle Avoidance for Utility-Based Geocasting
          Fernando Maymi and Manuel Rodriguez-Martinez

6:20-6:40  An Analysis of Business Models of Web 2.0 Application
          Shari S. C. Shang, Ya-Ling Wu and Oliver C. L. Hou

6:40-7:00  A Secure Billing Protocol for Grid Computing
          Chia-Hui Wei, Yeo-Hao Chin and Chun-Ta Li

7:00-7:20  A Heuristic Model of Network-Based Group Decision Making for E-Services
          Wei-Lun Chang, Yi-Ping Lo and Yu-Ting Hong

C SESSIONS  (Salon H)

SESSION MC1: INFORMATION SECURITY & PRIVACY I

CHAIR: Dr. Haitham Hamza, Cairo University, Egypt
Co-CHAIR:

9:10am - 10:10am

9:10-9:30  An Efficient PRNG based on the Hybrid Cellular Automata for the Dimension
          Sang-Ho Shin and Kee-Young Yoo

9:30-9:50  A Peer to Peer Federated Authentication System
          Myong Kang and Amitabh Khashnobish

9:50-10:10 Deception Detection Based on SVM for Chinese Text in CMC
          Hu ZHANG, Shan-de WEI, Hong-ye TAN and Jia-heng ZHENG

10:10-10:30  Coffee Break

SESSION MC2: INFORMATION SECURITY & PRIVACY II

CHAIR: Dr. Fangyang Shen, Northern New Mexico College, USA
Co-CHAIR:

10:30am - 12:30pm

10:30-10:50  Authenticated Dictionary-based Attribute Sharing in Federated Identity Management
          Dongwan Shin, Rodrigo Lopes and William Claycomb

10:50-11:10  An Authentication System Based on Palmprint
          Hanmandlu Madasu, HM Gupta, Neha Mittal and Shantaram Vasikarla

11:10-11:30  Attacks on a Block Based SVD Watermarking Scheme
          Huo-Chong Ling, Swee-Huay Heng and Bok-Min Goi

11:30-11:50  An New Steganography Scheme based on an Index-color Image
          Se-Min Kim, Ziqiang Cheng, Sang-Ho Shin and Kee-Young Yoo

11:50-12:10  Automated Risk and Utility Management
          Andreas Ekelhart, Stefan Fenz and Thomas Neubauer
12:10-12:30  Extending I-Diversity for Better Data Anonymization  
*Hongwei Tian and Weining Zhang*

12:30-1:30  Lunch (On Your Own)

**SESSION MC3: INFORMATION SECURITY & PRIVACY III**

CHAIR: Dr. Kalavathi Alla, Christu Jaynthi Jubilee College, India  
Co-CHAIR: Dr. Stefan Fenz, Vienna University of Technology, Austria

1:30pm - 4:30pm

1:30-1:50  An Efficient and Reliable Time Variant Three-Entity and Data Authentication of Remote User  
Using Smart card  
*Chandan Koner, Chandan Tilak Bhunia and Ujjwal Maulik*

1:50-2:10  Evaluation of Two Privacy-Preserving Protocols for the DNS  
*Sergio Castillo-Perez and Joaquin Garcia-Alfaro*

2:10-2:30  A Novel Mobile-Controlled Handover Scheme in Heterogeneous Wireless Networks  
*Haibo Xu, Hui Tian and Ping Zhang*

2:30-2:50  A Verifiable Electronic Voting Scheme Over the Internet  
*Chun-Ta Li, Min-Shiang Hwang and Yan-Chi Lai*

2:50-3:10  T-PIM: Trusted Password Input Method against Data Stealing Malware  
Manabu Hirano, Tomohiro Umeda, Takeshi Okuda, Eiji Kawai and Suguru Yamaguchi

3:10-3:30  Federated Authentication Mechanism by using Cellular Phone - Collaboration with OpenID -  
*Ryu Watanabe and Toshiaki Tanaka*

3:30-3:50  Practical Power Analysis Attacks to RSA on a Large IP Portfolio SoC  
*Guido Marco Bertoni, Luca Breveglieri, Alessandro Cominola, Filippo Melzani and Ruggero Susella*

3:50-4:10  JACED: A Network Security System Implementation  
*Mohsen Beheshti, Jianchao Han, Kazimierz Kowalski, Joel Ortiz and Johnly Tomelden*

4:10-4:30  Leveraging Parent Mitigations and Threats for CAPEC-Driven Hierarchies  
*Patrick Engebretson and Joshua Pauli*

4:30-5:00  Coffee Break

**SESSION MC4: DOMAIN PRODUCT LINE ENGINEERING**

CHAIR: Dr. L. A. Vieira Dias, ITA, Brazil  
Co-CHAIR:

5:00pm – 7:00pm
SESSION MD1 – POSTERS
9:30am -11:30am                 (Location: Hallway )

An Innovative Oscillator Based on LDMOS Capacitor
Huang Wei-hai and DAI Yu-ji
Application of Data Collecting Used Comero In Quality Management System
Yan-fang Yue, Rui-gang Zhang, Guang Yang and Guang-Le Ge
Anonymity Leakage Reduction in Network Latency
Longy Anyanwu
A Novel Hindi Text Steganography Using Letters,Letter Diacritics and its Compound Words
Kalavathi Alla and Dr. Siva Ram Prasad Ramineni
Performance Comparison of BPSK in Rayleigh and AWGN Channel by Montecarlo Simulation Method Vijit Gupta, Vivek Diwedi and Sahil Chaudhary
The research of the Component-based Software Engineering
Yong Mu
WERCCS: A Client-side Workflow Enactment Service Using AJAX
Mahin Jeyachandran and Kevin Gary
Is Continuous Compliance Assurance Possible?
Joseph D’Alessandro, Cynthia Tanner, Bonnie Morris and Tim Menzies

SESSION MD2 – POSTERS
1:30pm - 3:30pm                 (Location: Hallway )

An Implementation of Central Optical Sensor Measurement/Observation System (COSMOS) with the Integrated FBG Sensor Control Device
Hyun-Kuk Kim, Won-Hyuk Yang, Hyun-Bum Choi and Young-Chon Kim
A Reinforced Authentication Protocol for Anti-Counterfeiting and Privacy Protection
Kang-Joong Seo, Jun-Chool Jeon and Kee-Yong Yoo
Insider Threat in Database Systems: Preventing Malicious Users’ Activities in Databases Manideep Chagarlamudi, Brajendra Panda and Yi Hu
Using Service Oriented Architecture in a Generic Virtual Power Plant
Peter Bach Andersen, Bjørn Poulsen, Chresten Træholt and Jacob Ostergaard
The web-based B2B environment with Web Services
Dong Han
A Web Service System with workflow modeling and scheduling
ShuAi Peng
A Methodology to Extract Emotions and add Expressions in Speech Synthesis
Manoj Chandak and Rajiv Dharaskar
Learning Theories in Computer Science Education
Jesús-Ubaldo Quevedo-Torero
Problems on Software Engineering Learning
Francisco Marcondes, Hamilton Brumatto, Éloiza Sonoda, Luiz Barboza and Jefferson Zanutto
Mona Salehi, Abbas Keramati, Sine Elli

April 28, 2009 - Tuesday

7:00am - 7:00pm: REGISTRATION (Second Floor, Conference Section)

7:30am - 8:30am: CONTINENTAL BREAKFAST

8:00am - 9:00am: Keynote by Dr. George J. Proeller, IEEE Distinguished Speaker

(Location: Salons K&L )

9:00am - 9:10am: BREAK

PARALLEL SESSIONS:

A SESSIONS (Salon C&D)

SESSION TA1: NETWORKING & WIRELESS COMMUNICATIONS I

CHAIR: Dr. N. Gajendar, Grambling State University, USA
Co-Chair: Dr. Fangyang Shen, Northern New Mexico College, USA

9:10am - 10:10am

9:10-9:30 Application of Game Theory for Cross-layer Design in Cognitive Wireless Networks
Yenumula Reddy and Cliff Bullmaster

9:30-9:50 Reconfigurable Relaying Topology in Cognitive Multihop Wireless Networks with Nonuniform Temporal and Spatial Traffic Distribution
Beatriz Lorenzo and Savo Glisic

9:50-10:10 A Sleep Scheduling Algorithm for Cluster-based Sensor Networks
Fangyang Shen

10:10-10:30 Coffee Break

SESSION TA2: NETWORKING & WIRELESS COMMUNICATIONS II
CHAIR: Dr. Y. B. Reddy, Grambling State University
Co-CHAIR: Dr. R. Gunasekaran, Anna University Chennai, India

10:30am-12:30pm

10:30-10:50 Cross-Layer Design Approach for Wireless Networks to Improve the Performance
  **Nikema Smith, Y.B. Reddy, Nandigam Gajendar**

10:50-11:10 Mitigation against MAI in a Space Time Spreading Software Defined Radio Test Bed
  **Shinhan Wee, Montse Ros and Peter James Vial**

11:10-11:30 An Empirical Study for Protecting Passive RFID Systems against Cloning
  **Mostafa El-Said**

11:30-11:50 Fault-tolerant Maximal Local-Connectivity on the Bubble-sort Graphs
  **Lun Min Shih and Jimmy J.M. Tan**

11:50-12:10 OPEN SLOT

12:10-12:30 OPEN SLOT

12:30-1:30 Lunch (On Your Own)

**SESSION TA3: SENSOR NETWORKS**

CHAIR: Dr. Fangyang Shen, Northern New Mexico College, USA
Co-CHAIR:

1:30pm - 4:30pm

1:30-1:50 A Service-oriented Middleware for Wireless Sensor and Actor Networks
  **Eduardo Cañete, Jaime Chen, Luis Llopis and Bartolomé Rubio**

1:50-2:10 An Online Multipath Routing Algorithm for Maximizing Lifetime in Wireless Sensor Networks
  **Mahmood R. Minhas, Sathish Gopalakrishnan and Victor C. M. Leung**

2:10-2:30 Micro T-Kernel: A Low Power and Small Footprint RTOS for Networked Tiny Devices
  **Masato Kamio, Keiichi Nakamura, Shinsuke Kobayashi, Noboru Koshizuka and Ken Sakamura**

2:30-2:50 Estimation Method for Total Nitrogen and Fiber Contents in Tealeaves as well as Grow Index of
  Tealeaves and Tea Estate Monitoring with Network Cameras
  **Kohei Arai**

2:50-3:10 Supporting Stateless Address Auto-configuration in IP-based Wireless Sensor Networks
  **Shafique Ahmad Chaudhry**

3:10-3:30 Performance Monitoring in Sensor Networks
  **Titsa Papantoni-Kazakos and AT Burrell**

  **Sattanathan Subramanian, Djamel Djenouri, Gutorm Sindre and Ilangko Balasingham**

3:50-4:10 OPEN SLOT
4:10-4:30 OPEN SLOT
4:30-5:00 Coffee Break

SESSION TA4: MOBILE COMPUTING & NETWORKING
CHAIR: Prof. Frans A. Henskens, University of Newcastle, Australia
CO-CHAIR:

5:00pm – 7:00pm
5:00-5:20 Towards an In-flight Infrared Peer-to-Peer Media Network
Thi Vu Phu, Vu Anh Huynh and Timo Bretschneider

5:20-5:40 AN ELECTION PROTOCOL IN MOBILE AD HOC DISTRIBUTED SYSTEMS
SungHoon Park

5:40-6:00 Performance Evaluation of GP3 - A Grid-based Spatial Index Infrastructure
Markus Esch, Jean Botev, Hermann Schloss and Ingo Scholtes

6:00-6:20 Prevention of Denial of Service Attacks and Performance Enhancement in Mobile Adhoc Networks
Gunasekaran R and Rhymend Uthariaraj V

6:20-6:40 Supporting Video Multicast in Wireless Ad Hoc Networks Using Multiple Paths and Multiple Description Coding
Osamah S. Badarneh, Michel Kadoch and Ahmed A. Elhakeem

6:40-7:00 OPEN SLOT
7:00pm-7:30pm Award Ceremony (Salon K)
7:30pm -8:00pm CASH BAR (Location: Salon J&M)
8:00pm-9:30pm CONFERENCE RECEPTION & DINNER (Location: Salon J&M)

B SESSIONS (Salon B&E)

SESSION TB1: SOFTWARE ENGINEERING EDUCATION I
CHAIR: Dr. Jagadeesh Nandigam, Grand Valley State University, USA
Co-CHAIR: Dr. Venkat N Gudivada, Marshall University, USA

9:10am - 10:10am (Location: Meeting Room)
9:10-9:30 Using Open Source Tools to Prevent Write-Only Code
Susan Loveland

9:30-9:50 Bridging the Research-Practice Gap in RE Through Effective Teaching
Andrew Connor, Jim Buchan and Krassie Petrova
9:50-10:10  Design Patterns Go To Hollywood: Teaching Patterns with Multimedia
            *Adam Dukovich and David Janzen*

10:10-10:30  Coffee Break

SESSION TB2: SOFTWARE ENGINEERING EDUCATION II

CHAIR: Dr. Jagadeesh Nandigam, Grand Valley State University, USA
Co-CHAIR: Dr. Venkat N Gudivada, Marshall University, USA

10:30am-12:50pm

10:30-10:50  The Road We’ve Traveled: 12 Years of Undergraduate Software Engineering at the Rochester Institute of Technology
            *J. Fernando Naveda, Michael Lutz, James Vallino, Thomas Reichlmayr and Stephanie Ludi*

10:50-11:10  Supporting Live Student Projects: Lessons Learned from the Small Project Support Center at Radford University
            *Jeff Pittges, Joseph Chase and Tracy Lewis*

11:10-11:30  Teaching Software Design Using a Case Study on Model Transformation
            *Yanxia Jia and Yonglei Tao*

11:30-11:50  Using Scaffolding to Improve Written Communication of Software Engineering Students
            *Gregory Hislop and Heidi Ellis*

11:50-12:05  Interface-Based Object-Oriented Design with Mock Objects
            *Jagadeesh Nandigam, Venkat N Gudivada, Abdelwahab Hamou-Lhadj, and Yonglei Tao*

12:05-12:20  The Impact of the Model-Driven Approach to Software Engineering on Software Engineering Education
            *Abdelwahab Hamou-Lhadj, Abdelouahed Gherbi, and Jagadeesh Nandigam*

12:20-12:35  Corporate compliance and its implications to IT Professionals
            *Venkat Gudivada and Jagadeesh Nandigam*

12:35-12:50  Deadlock Detection Views of Distributed Database
            *B.M. Monjurul Alom, Frans Henskens and Michael Hannaford*

12:50-1:30  Lunch (On Your Own)

SESSION TB3: SOFTWARE TESTING I

CHAIR: Dr. James McCaffrey, Volt Information Sciences, USA
CO-CHAIR:

1:30pm - 4:30pm

1:30-1:50  Using the Multi-Attribute Global Inference of Quality (MAGIQ) Technique for Software Testing
            *James McCaffrey*

1:50-2:10  The Design of an Automated Unit Test Code Generation System
            *Gary Fix*
2:10-2:30  Model Based Software Estimation  
  *Bruce Benton*

2:30-2:50  Test Object Model  
  *Neill Thompson, Ric Ellsworth, Dan Wenzel and Heather Munion*

2:50-3:10  Automated Testing of Environment-Dependent Programs &amp;#8722; A case study of modeling the File System for Pex  
  *Soonho Kong, Nikolai Tillmann and Jonathan de Halleux*

3:10-3:30  A Dependence Graph-based Test Coverage Analysis Technique for Object-Oriented Programs  
  *E S F Najumudheen, Rajib Mall and Debasis Samanta*

3:30-3:50  Declarative Testing: A Paradigm for Testing Software Applications  
  *Ed Triou, Zafar Abbas and Sravani Kothapalle*

3:50-4:10  The Architecture, Design, and Operation of a Virtual Network Hardware Emulation (VNHE) System  
  *David Harding*

4:10-4:30  The Design of a System for Testing Database-Centric Software Applications using Database Surrogates  
  *Adrian Bonar*

4:30-5:00  Coffee Break

**SESSION TB4: SOFTWARE TESTING II**

CHAIR: Dr. James McCaffrey, Volt Information Sciences, USA  
CO-CHAIR:

5:00pm – 7:00pm

5:00-5:20  Test Automation Framework for Implementing Continuous Integration  
  *Eun Ha Kim, Jong Chae Na and Seok Moon Ryoo*

5:20-5:40  Testing SQL Server® Integration Services runtime using models and mock objects  
  *Kaarthik Sivashanmugam and Senthil Palanisamy*

5:40-6:00  TAO Project: An Intuitive Application UI Test Toolset  
  *Min Li, Jason Wang and Lamar Damata*

6:00-6:20  Modified Linear Scan Register Allocation Algorithm  
  *S. Subha*

6:20-6:40  An approach for SQL injection vulnerability detection  
  *Li Miao*

6:40-7:00  OPEN SLOT

7:00pm-7:30pm  Award Ceremony (Salon K)

7:30pm -8:00pm  CASH BAR  (Location: Salon J&M)
8:00pm-9:30pm  CONFERENCE RECEPTION & DINNER (Location: Salon J&M)

C SESSIONS  (Salon H)

SESSION TC1: HIGH PERFORMANCE COMPUTING ARCHITECTURES I

CHAIR: Dr. Fangyang Shen, Northern New Mexico College, USA
Co-CHAIR:

9:10am - 10:10am

9:10-9:30  A Object Model for Java and Its Architectural Support
Tan Yiyu, Yau Chihang and Fong Anthony S.

9:30-9:50  Reconfigurable Processor LSI Based on ALU Array with Limitations of Connections of ALUs for Software Radio
Makoto Ozone, Tatsuo Hiramatsu, Katsunori Hirase and Kazuhisa Iizuka

9:50-10:10  An Energy-Efficient Reliability Model for Parallel Disk Systems
Fangyang Shen

10:10-10:30  Coffee Break

SESSION TC2: HIGH PERFORMANCE COMPUTING ARCHITECTURES II

CHAIR: Dr. Nader Bagherzadeh, University of California, Irvine, USA
Co-CHAIR:

10:30am - 12:50pm

10:30-10:50  Parallel and Pipeline Processing for Block Cipher Algorithms on a Network-on-Chip
Yoon Seok Yang, Jun Ho Bahn, Seung Eun Lee and Nader Bagherzadeh

10:50-11:10  Bus-based and NoC Infrastructure Performance Emulation and Comparison
Ling wang

11:10-11:30  A NoC Emulation/Verification Framework
Peng Liu, Yangfan Liu, Chunchang Xiang, Xiaohang Wang, Bingjie Xia, Weidong Wang and Qingdong Yao

11:30-11:50  Scheduling Techniques for Multi-Core Architectures
Akira Hatanaka and Nader Bagherzadeh

11:50-12:10  Fuse-N: Framework for Unified Simulation Environment for Network-on-chip
Venkatesan Muthukumar and Ashwini Raina

12:10-12:30  Traffic Aware Scheduling Algorithm for Network on Chip
Venkatesan Muthukumar and Ashwini Raina

12:30-12:50  An Algorithm for Buffer Cache Management
S. Subha

12:50 - 1:30  Lunch (On Your Own)
SESSION TC3:  E-COMMERCE

CHAIR: Haiping Xu, University of Massachusetts Dartmouth, USA
Co-CHAIR:

1:30pm - 4:30pm

1:30-1:50  Model-Based Specification of Flexible and Complex Bidding Strategies in Agent-Based Online Auctions
Benjamin Ford, Haiping Xu, Christopher Bates and Sol Shatz

1:50-2:10  Online Payments Using Handwritten Signature Verification
Alan McCabe and Jarrod Trevathan

2:10-2:30  Inference of Online Auction Shills using Dempster-Shafer Theory
Fei Dong, Sol Shatz and Haiping Xu

2:30-2:50  A Proactive Approach to Preventing Phishing Attacks Using a Phark
Ripan Shah, Jarrod Trevathan, Wayne Read and Hossein Ghodosi

2:50-3:10  Collecting Data from Online Auctions
Rodel Balingit, Jarrod Trevathan, Yong Jin Lee and Wayne Read

3:10-3:30  Analysing Data from Online Auctions
Rodel Balingit, Jarrod Trevathan and Wayne Read

3:30-3:50  The Behavior and Preferences of Users on Web 2.0 Social Network Sites: an Empirical Study
Shwu-Min Horng

3:50-4:10  A Case Study: Open Source Community and the Commercial Enterprise
Kevin Gary, Harry Koehnemann, John Blakley, Cheryl Goar, Holly Mann and Albert Kagan

4:10-4:30  A Flexible Notification System for Stock Investors
Jameela Al-Jaroodi and Nader Mohamed

4:30-5:00  Coffee Break

SESSION TC4:  COMPUTER INFORMATION TECHNOLOGY EDUCATION

CHAIR: Dr. Jesus U Quevedo-Torrero, University of Wisconsin – Parkside, USA
Co-CHAIR: Prof. Herbert Schanker, CUNY- College of Staten Island, USA

5:00pm – 7:20pm

5:00-5:20  Internet Information Retrieval for Enabling Student Projects
Nader Mohamed, Jameela Al-Jaroodi and Imad Jawhar

5:20-5:40  Exploring the critical success factors of mobile commerce via qualitative method- in case of insurance industry
Ya-Yueh Shih and Siao-Sian Huang

5:40-6:00  The Science of Computing: Concepts and Current Technologies
Herbert Schanker, Deborah Sturm and Sarah Zelikovitz

6:00-6:20 Learning Outcomes for an Introductory Database Project
     Jeff Pittges, Robert Phillips and Premchand Uppuluri

6:20-6:40 Experiences using new technologies in a Computer Architecture course
     Prem Uppuluri and Maung Htay

6:40-7:00 Virtual Age: Enabling Technologies and Trends
     Hamid Mahmoodi and Ali Jalali

7:00pm-7:30pm Award Ceremony (Salon K)

7:30pm -8:00pm CASH BAR   (Location: Salon J&M)

8:00pm-9:30pm CONFERENCE RECEPTION & DINNER (Location: Salon J&M)

SESSION TD1 – POSTERS

9:30am -11:30am (Location: Hallway )
Variable Block Size Architecture for Programs
S. Subha
Ternary Concatenated Codes with QAM-9 Modulation and their Possibilities
Vitaliy Kuznetsov
Quantum Cryptography- A New Generation of Information Technology Security System
Mehrdad Sharbaf
Development of Collapse-Sensing Phone for Emergency Positioning System
Duksung Jang, Seungchan Choi and Taesoon Park
A Pervasive System for enabling Older Adults to cope with Depression by motivating them to Socialize
Alejandro Aguirre, Marcela D. Rodriguez and Angel G. Andrade
Exchange routing information between new neighbor nodes to improve AODV performance
Le Anh Tuan and Yuan Luo
A New Data Communication Protocol for Distributed Mobile Databases in Mobile Ad-Hoc Networks
Afsaneh Rahbar, Mehran Mohsenzadeh and Amir Masoud Rahmani
A Hybrid Reconfiguration Algorithm for Fast Continuous Query Processing
Christopher Kosecki and Joseph Gomes
Providing “Second Chance” to the Students and Improving Retention
Syed Rahman and Amitava Karmaker
Software Testing for Web-Applications Non-Functional Requirements
Breno Lisi Romano, Gláucia Braga e Silva, Henrique Fernandes de Campos, Ricardo Godoi Vieira, Adilson
Marques da Cunha, Fábio Fagundes Silveira and Alexandre Carlos Brandão Ramos
On the secure sharing of legacy data
Douglas Russell, David Power, Mark Slaymaker, Ghita Kouadri Mostefaoui, Xiaoqi Ma and Andrew Simpson

SESSION TD2 – POSTERS

1:30pm - 3:30pm (Location: Hallway )
Using Best Practices of Software Engineering into a Real Time System Development
Ricardo Godoi Vieira, Breno Lisi Romano, Gláucia Braga e Silva, Henrique Fernandes de Campos and Adilson
Marques da Cunha
Agile Principles in Academic Education: A Case Study
Maximilian Reiss and Jennifer Schiller
Weaving Agile Software Development Techniques into a Traditional Computer Science Curriculum
Peter Maher
Using a Tool to Generate an Web-Services Adapter
Peng Zhang
Collaborative Web Search with WikiLinks
Chris Lüer and Jonathan Cummins
Evaluating Web 2.0 Services Based on 7C Framework
Milad Sabouri and Ali Akbar Jalali
Improving the Security of Non-PKI Methods for Public Key Distribution
Chun-Ta Li and Min-Shiang Hwang
An Algorithm for Secure Deletion in Flash Memories
S. Subba
Reality of A New Control Sampling Module
Xiaoyong Lu and Zhuo Fang
Decidability and Constructivism
Jesús Ubaldo Quevedo-Torrero
A Non-Inclusive Cache Model
S. Subba
A Tutoring Tool for Formulating Database Queries with Complex Logic Quantifiers
Jalal Kawash

April 29, 2009 - Wednesday

7:00am-12:00pm: REGISTRATION (Second Floor, Conference Section)
7:30am - 8:30am: CONTINENTAL BREAKFAST

A SESSIONS (Salon K)

SESSION WA1: MIDDLEWARE

CHAIR: Dr. Luís Ferreira Pires, University of Twente, Netherlands
Co-CHAIR: Dr. Nader Mohamed, UAE University, United Arab Emirates

8:00am - 10:00am

8:00-8:20  Federated and shared use of sensor networks through security middleware
           Christophe Huygens and Wouter Joosen

8:20-8:40  Uniform and Efficient Data Provisioning for SOA-based Applications
           Ralf Wagner and Bernhard Mitschang

8:40-9:00  MINDS: A Middleware Infrastructure for Distributed Services Provisioning
           Johnson Iyiilade, Klaas Kabini and Matthew Adigun

9:00-9:15  A Systematic Review of Software Product Lines Applied to Mobile Middleware
           Yuri Morais, Thais Burity and Glédson Elias

9:15 - 9:30 Mobile Middleware Solution for Automatic Reconfiguration of Applications
        Alin Florindor Murarasu

9:30- 9:45 Developing Service Oriented Sensor/Actuator Networks using a Tailored Middleware
        Stephan Sommer, Christian Buckl and Alois Knoll
9:45-10:00 The Development of a Multi-agent based Middleware for RFID Asset Management System using the PASSI Methodology
   Libe Valentine Massawe, Farhad Aghdasi and Johnson Kinyua

10:00-10:30 Coffee Break

SESSION WA2: E-HEALTH, E-GOVERNMENT, E-SERVICES

CHAIR: Dr. Samir Hamade, Kuwait University, USA
Co-CHAIR:

10:30am - 12:30pm

10:30-10:50 A Search Service for Software Components based on a Semi-Structured Data Representation Model
   Talles Brito, Hugo Nóbrega, Thiago Ribeiro and Glédson Elias

10:50-11:10 The use of health smart card in bridge of continuity of care for pregnant woman
   An Jim Long and Polun Chang

11:10-11:30 Information and Communication Technology in Arab Countries: Problems and Solutions
   Samir N. Hamade

11:30-11:50 The role of Enterprise Architecture in Healthcare-IT
   kamran ahsan

11:50-12:10 OPEN SLOT

12:10-12:30 OPEN SLOT

12:30 - 1:30 Lunch (On Your Own)

SESSION WA3: MOBILITY & RESOURCE MANAGEMENT

CHAIR: Prof. Vicente Casares-Giner, Universidad Politecnica de Valencia, Spain
Co-CHAIR:

1:30pm - 4:30pm

1:30-1:50 Optimized hybrid resource allocation in wireless cellular networks with and without channel reassignment
   Xin Wu, Arunita Jaekel, Atatul Bari and Alioune Ngom

1:50-2:10 Multi-Slot Channel Allocation for Priority Packet Transmission in the GPRS Network
   Jun Zheng and Mengyu Qiao

2:10-2:30 Optimum Power Allocation for Distributed Antenna Systems with Large-scale Fading-only Feedback
   Donho Lim, Kwonhue Choi and Huaping Liu

2:30-2:50 Analysis of VoIP over HSDPA Performance with Discontinuous Reception Cycles
   Kari Aho, Ilmari Repo, Timo Nihtilä and Tapani Ristaniemi
2:50-3:10  A Lookahead Strategy for Movement-Based Location Update in Wireless Cellular Networks
Vicente Casares-Giner and Pablo García-Escalle

3:10-3:30  Performance Analysis of MQAM-OFDM based WLAN in presence of Zigbee interference in
AWGN and Rayleigh fading channel
Minakshmi Roy and Jamadagni H.S

3:30-3:50  Quality of Experience Measurements for Video Streaming over Wireless Networks
Kandaraj Piamrat, Jean-Marie Bonnin, Cesar Viho and Adlen Ksentini

3:50-4:10  On Idle Mode Mobility State Detection in Evolved UTRAN
Jani Puttonen, Niko Kolehmainen, Tero Henttonen and Jorma Kaikkonen

4:10-4:30  DMAP-FR: Integrated Mobility and Service Management with Failure Recovery Support for
Mobile IPv6 Systems
Weiping He and Ing-Ray Chen

4:30-5:00  Coffee Break

SESSION WA4: E-LEARNING

CHAIR: Dr. Fangyang Shen, Northern New Mexico College, USA
Co-CHAIR:

5:00pm – 7:00pm

5:00-5:20  Extending the Pair Programming Pedagogy to Support Remote Collaborations in CS Education
Alan Shaw

5:20-5:40  The Knowledge building of the Eco-Classroom
Ming Jiang

5:40-6:00  The Case Study activities in a Web-based Environment
Guang Yang

6:00-6:20  Translating e-learning Flow-Oriented Activity Sequencing Descriptions into Rule-based Designs
Ivan Martinez-Ortiz, Jose-Luis Sierra and Baltasar Fernandez-Manjon

6:20-6:40  Distance-Learning and Converging Mobile Devices
Kenneth Hoganson

6:40-7:00  What Are the Strengths and Weaknesses of Online Professional Development for K-12 Inservice
Teachers from the Views of Online Learning Forum (OLF) Designers?
Li-chu Sung

Conference Conclusion

B SESSIONS (Salon L)

SESSION WB1: AMBIENT-ASSISTED LIVING FOR ELDERLY PEOPLE

CHAIR: Dr. Werner Kurschl, Upper Austria University of Applied Sciences, Austria
Co-CHAIR:

8:00am - 10:00am

8:00-8:20 Promises and Challenges of Ambient Assisted Living Systems
Hong Sun, Vincenzo De Florio, Ning Gui and Chris Blondia

8:20-8:40 e-Care – IHE-Compliant Patient-Data Exchange in Order to Enable Home & Mobile Care of Elderly People within an e-Care Affinity Domain
Barbara Franz, Markus Lehner, Herwig Mayr and Margit Mayr

8:40-9:00 Modeling Situation-Aware Ambient Assisted Living Systems for Eldercare
Werner Kursch, Stefan Mitsch and Johannes Schoenboeck

9:00-9:20 User-centered design and fast prototyping of an ambient assisted living system for elderly people
Suzanne Kieffer, Jean-Yves Lawson and Benoît Macq

9:20-9:40 Implementation of a Physical Activity Monitoring System for The Elderly People With Built-in Vital Sign and Fall Detection
Anh Dinh

9:40-10:00 Ambient Information Systems for Supporting Ageing in Place
Juan Pablo García, Marcela Rodríguez, Angel Andrade, Diana Saldaña, Fabian Mercado and Emmanuelle Ruelas

10:00-10:30 Coffee Break

SESSION WB2: SIGNAL PROCESSING APPLICATIONS

CHAIR: Dr. K.B.Jayanthi, K.S.Rangasamy College of Technology, India
Co-CHAIR:

10:30am - 12:50pm

10:30-10:50 Novel Blind Signal Classification Method Based on Data Compression
Xudong Ma

10:50-11:10 Performance Comparison of Wiener Filter and CLS Filter on 2D Signals
Raja Rajeswari Konduri

11:10-11:30 A back end system for digital image library organization based on concept learning
Paraskevi Lampropoulou, Dionysios Sotiropoulos, Aristomenis Lampropoulos and George Tsihirintzis

11:30-11:50 Feature Combination Using Multiple Spectral Cues for Robust Speech Recognition in Mobile Communications
Djamel Addou, Sid-Ahmed Selouani, Malika Boudraa and Bachir Boudraa

11:50-12:10 Optimal Transmission Time of Secondary User in an Overlay Cognitive Radio System
Babak Abbasi Bastami and Ebrahim Saberinia

12:10-12:30 Design of a CC-MC-CDMA system for Gigabit DSL (GDSL)
Jacques van Wyk and Louis Linde

12:30 - 1:30 Lunch (On Your Own)
### SESSION WB3: NEW TRENDS IN IMAGE PROCESSING

**CHAIR:** Dr. Shantaram Vasikarla, American InterContinental University, USA  
**Co-CHAIR:**

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<th>Session</th>
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<td>1:30-1:50</td>
<td>Post-processing of Multiview Images: Depth Scaling</td>
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<td><em>Manbae Kim</em></td>
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<td>1:50-2:10</td>
<td>Design of a Logarithmic Domain 2-D Convolver for Low Power Video Processing Applications</td>
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<td><em>Hau Ngo and Vijayan Asari</em></td>
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<td>2:10-2:30</td>
<td>Side-Match Vector Quantizers Using Neural Network Based Variance Predictor for Image Coding</td>
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<td><em>Shuangteng Zhang</em></td>
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<td>2:30-2:50</td>
<td>OPTIMIZATION OF VC-1/H.264/AVS VIDEO DECODERS ON EMBEDDED PROCESSORS</td>
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<td><em>Guo-An Jian, Ting-Yu Huang, Ju-Chin Chu and Jiun-In Guo</em></td>
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<td>2:50-3:10</td>
<td>Carotid Artery Boundary Extraction Using Segmentation Techniques: A Review and Comparative Study</td>
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<td><em>Jayanthi K.B. and Wahida Banu R.S.D.</em></td>
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<td>3:10-3:30</td>
<td>Barcode Watermarking</td>
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<td><em>Mohammad Eyadat, Hedley Morris and Imad Muhi El-Ddin</em></td>
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<td>3:30-3:50</td>
<td>Fuzzy Edge and Corner Detector for Color Images</td>
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<td><em>Hanmandlu Madasu, O.P. Verma, Pankaj Gangwar and Shantaram Vasikarla</em></td>
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<td>3:50-4:10</td>
<td>Medical Image Segmentation Using Improved Mountain Clustering Approach</td>
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<td><em>Nishchal K. Verma, Payal Gupta, Pooja Agrawal and Madasu Hanmandlu and Shantaram Vasikarla</em></td>
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<td>4:10-4:30</td>
<td>Epileptic Seizures Detection using Continuous Time Wavelet Based Artificial Neural Networks</td>
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<td><em>Berdakh Abibullaev and Hee Don Seo, Christian Menkens</em></td>
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<td>4:30-5:00</td>
<td>Coffee Break</td>
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### SESSION WB4: WEB TECHNOLOGIES AND DATA MINING

**CHAIR:** Dr. Brenda Miles, Grambling State University  
**Co-CHAIR:**

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<th>Time</th>
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<tr>
<td>5:00-5:20</td>
<td>A Study of Color Histogram Based Image Retrieval</td>
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<td><em>Rishav Chakravarti and Xiannong Meng</em></td>
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<td>5:20-5:40</td>
<td>Improving Web Search Using Contextual Retrieval</td>
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<td><em>Dilip Limbu, Andrew Connor, Russel Pears and Stephen MacDonell</em></td>
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<td>5:40-6:00</td>
<td>Image Query Service Using Content Management Techniques</td>
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<td><em>Daniel Beatty and Noe Lopez-Benitez</em></td>
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6:00-6:20  XML Based Implementation of a Bibliographic Database and Recursive Queries
Kazem Taghva

6:20-6:40  3D VQI: 3D Visual Query Interface
Subhash Uppalapati, John C. Femiani, Anshuman Razdan and Kevin Gary

6:40-7:00  Exploring Hierarchically Organized Georeferenced Multimedia Annotations in the MobiTOP System
Thi Nhu Quynh Kim, Khasfariyati Razikin, Dion Hoe-Lian Goh, Ee-Peng Lim, Yin Leng Theng, Quang Minh Nguyen, Aixin Sun, Chew Hung Chang and Kalyani Chatterjea

7:00-7:15  Classification of Movies and Television Shows Using Motion
Mark Smith

7:15-7:30  Toward Extending the Capability of Model-Based Engineering Tool Set with Color Petri Nets
Hassan Reza

7:30-7:45  A Safety Analysis Method Based on Fault Tree Analysis and Petri Nets
Hassan Reza and Malvika P Pimple

7:45-8:00  PCI: Plants Classification &Identification Classification of Web pages for Constructing Plants Web Directory
madjid khalilian, hassan abolhassani, farsad zamani and Norwati Mostapha

Conference Conclusion

Conference Conclusion

END OF SCHEDULE