17th International Conference on
Software Engineering
and
Data Engineering
(SEDE-2008)

PROGRAM

June 30 - July 2, 2008

 Omni Los Angeles Hotel at California Plaza
 Los Angeles, California   USA

Sponsored by

International Society for
Computers and Their Applications

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Cary, NC  27511-4216
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17th International Conference on
Software Engineering and Data Engineering
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SPONSOR
International Society for Computers and Their Applications (ISCA)

In cooperation with: Winona State University, University of Houston-Clear Lake and the
University of Texas at Dallas

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Rym Zalila-Wenkstern, University of Texas at Dallas, USA

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Eric Wong, U. Of Texas at Dallas, USA
W. Lok Yeung, Lingnan U., Hong Kong
Kwok-Bun Yue, U. of Houston-Clear Lake, USA
Qinghua Zou, Microsoft Research, USA
Monday, June 30, 2008

All meeting rooms are located on the 2nd Floor.

7:45 a.m. - 6:00 p.m.  REGISTRATION – Coffee, Tea, Pastries  (Foyer)

8:45 a.m. - 9:00 a.m.  WELCOME   (Crocker Room, 2nd Floor)
Dr. Narayan Debnath, Winona State University, USA
Dr. Rym Zalila-Wenkstern, University of Texas at Dallas, USA

9:00 a.m. – 10:00 a.m.  INVITED SPEAKER – Software Engineering
“COMPUTER and SOFTWARE ENGINEERING:
What was, what is, and what will be”
Dick B. Simmons, P. E., Ph.D., IEEE Fellow
Texas A&M University
Location:  Crocker Room, 2nd Floor

10:00 a.m. – 10:30 a.m.  COFFEE BREAK

DATA ENGINEERING AND DATA MINING
Monday, June 30, 10:30 a.m. – 12:30 p.m., Crocker Room, 2nd Floor
Session Chair:  Dr. William Perrizo, North Dakota State University

SESSION 1A:

1. Data Mining Classification Using Parisot Correlation
   William K. Perrizo and Gregory H. Wettstein (North Dakota State University, USA)

2. Bayesian Classification in Combinatorial Game Theory
   David Hooks and Qin Ding (East Carolina University, USA)

3. Vertical Business Intelligence Classification
   William K. Perrizo and Gregory H. Wettstein (North Dakota State University, USA)

4. Document Clustering using Word Sense Disambiguation
   M. S. Mostafa, M. H. Haggag and W. H. Gomaa (Helwan University, Egypt)

5. Layout Analysis and Classification using Genetic Algorithm
   Farnaz Fotrousi and Morteza Analoui (Iran University of Science and Technology, Iran)
SPECIAL SESSION: APPLICATIONS IN SOFTWARE ENGINEERING and DATA ENGINEERING I
Monday, June 30, 10:30 a.m. – 12:00 p.m., Hershey Room, 2nd Floor
Session Chair: Dr. Narayan Debnath, Winona State University

1. Prototype Details of the Smartphone-Based Researcher's Companion Software (RCS)
   Brian Tackitt, Muhanna Muhanna and Sergiu Dascalu (University of Nevada, Reno, USA)

2. How to Measure Testing Results
   M. Burgin (UCLA, USA) and N. Debnath (Winona State University, USA)

3. Data Reduction Algorithm Based on Gaussian Image Estimation
   E. A. Zanaty, Sultan Aljahdali (TAIF University, Saudi Arabia) and Narayan Debnath (Winona State University, USA)

12:30 p.m. – 2:00 p.m. LUNCH BREAK (on your own)

SPECIAL SESSION: APPLICATIONS IN SOFTWARE ENGINEERING and DATA ENGINEERING II
Monday, June 30, 2:00 p.m. – 4:00 p.m., Crocker Room, 2nd Floor
Session Chair: Dr. Mark Burgin, UCLA

1. TouchTabs: Software Prototype for Guitar Music Composition using Touch Screens
   Matt Whipple and Sergiu Dascalu (University of Nevada, Reno, USA)

2. Web Cache Adaptive Replacement Policy by LRU and LFU
   Wenying Feng and Hua Chen (Trent University, Canada)

3. Improving Fuzzy Algorithms for Automatic Magnetic Resonance Image Segmentation
   E. A. Zanaty, Sultan Aljahdali (Taif University, Saudi Arabia) and Narayan Debnath (Winona State University, USA)

MEDICAL and BUSINESS APPLICATIONS
Monday, June 30, 2:00 p.m. – 4:00 p.m., Hershey Room, 2nd Floor
Session Chair: Dr. Wahab Abdul, Nanyang Technological University

1. Pattern Recognition in Medical Diagnosis, Prognosis, and Treatment
   D. L. Hudson and M. E. Cohen (University of California, San Francisco, USA)

2. Neuro-Fuzzy ICU Ventilator Patients Modeling
   Abdul Wahab, Quek H. C. and Luah A. H. (Nanyang Technological University, Singapore)

3. Towards Automatic Integration of the Business-Data Layers in Enterprise-Systems
   M. Balaban (Ben-Gurion University of the Negev, Israel) and L. Limonad (Ben-Gurion University of the Negev, Israel and University of British Columbia, Canada)

4. A Model for Accounting Standards and its Applications
   Pierre M. Teller (University of Nice, France)

4:00 p.m. – 4:30 p.m. COFFEE BREAK
SESSION 3A: APPLICATIONS: FEATURE EXTRACTION and NLP
Monday, June 30, 4:30 p.m. – 6:30 p.m., Crocker Room, 2nd Floor
Session Chair: Dr. Kam-Hoi Cheng, University of Houston

1. **Using Moments for Feature Extraction from Time Series Data**
   Durga Toshniwal (Indian Institute of Technology Rourkee, India)

2. **A Multi-Dimensional Data Organization for Natural Language Processing**
   Waleed Faris and Kam-Hoi Cheng (University of Houston, USA)

3. **Features Extraction for Speech Emotion**
   Norhaslinda Kamaruddin and Abdul Wahab (Nanyang Technological University, Singapore)

4. **Reducing Instrumentation Intrusion for Coverage and Reconnaissance**
   Dennis Edwards and Sharon Simmons (University of West Florida, USA)

SESSION 3B: SOFTWARE ENGINEERING
Monday, June 30, 4:30 p.m. – 6:30 p.m., Hershey Room, 2nd Floor
Session Chair: Dr. Jean-Louis Boulanger, U. of Technology of Compiegne

1. **An Example of Requirements Engineering in a Model-based Methodology for Embedded Automotive Software**
   Jean-Louis Boulanger and Vân Quang Dao (University of Technology of Compiegne, France)

2. **Checking Design Heuristics Violations for Aspect-Oriented Software and Object-Oriented Software**
   Mathupayas Thongmak and Pornsiri Muenchaisri (Chulalongkorn University, Thailand)

3. **Use of Ontologies in Software Engineering**
   Emdad Ahmed (Wayne State University, USA)

4. **gRUP- A Globalized Approach to Software Engineering**
   Amr El-Kadi and Omar Bahy Badreddin (The American University in Cairo, Egypt)
8:00 a.m. – 6:00 p.m.  REGISTRATION – Coffee, Tea, Pastries

9:00 a.m. – 10:00 a.m.  INVITED SPEAKER

“THE ENGINEERING OF SCIENCE”

D. S. Parker, Ph.D.
University of California at Los Angeles (UCLA)

Location: Crocker Room, 2nd Floor

10:00 a.m. – 10:30 a.m.  COFFEE BREAK

SESSION 4A: SOFTWARE AGENT and SOFTWARE MEASUREMENTS
Tuesday, July 1, 10:30 a.m. – 12:30 p.m., Crocker Room, 2nd Floor
Session Chair: Dr. Robert Fourney, South Dakota State University

1. Software Agents Oriented Approach To Warehouse Management Systems Design
   Kemal Taljanovic (Archway Marketing Services, USA) and Adnan Salihbegovic
   (University of Sarajevo, Bosnia)

2. AVATARSIM: A Multi-Agent System for Emergency Evacuation Simulation
   Sharad Sharma (Bowie State University, USA)

3. Torbit: an Open Source Flaw Measurement Tool Suite
   Robert S. Fourney and Austin D. Hanson (South Dakota State University, USA)

4. An Algebraic Query Method for Static Program Analysis and Measurement
   Hamoun Ghanbari and Constantinos Constantinides (Concordia University, Canada)

SESSION 4B: SPECIAL SESSION: APPLICATIONS IN SOFTWARE ENGINEERING and DATA ENGINEERING III
Tuesday, July 1, 10:30 a.m. – 12:00 p.m., Hershey Room, 2nd Floor
Session Chair: Dr. Narayan Debnath, Winona State University

1. Structural Organization of Temporal Databases
   M. Burgin (UCLA, USA)

2. An Approach to Bengali Text Steganography
   S. Changder (National Institute of Technology, India) and N. C. Debnath (Winona State University, USA)

3. Facility Design using Iterative Heuristic Algorithm
   Rekha Bhowmik (Sam Houston State University, USA) and Ilhyun Lee (The University of Texas of the Permian Basin, USA)
12:30 p.m. – 2:30 p.m.  CONFERENCE LUNCHEON and Awards Ceremony
LOCATION: NOE’ RESTAURANT, 3rd Floor

SOFTWARE DEVELOPMENT
Tuesday, July 1, 2:30 a.m. – 4:00 p.m., Crocker Room, 2nd Floor
Session Chair: Dr. Osman Hegazy, Cairo University

1. RT3-TUCS: How to Build a Certifiable and Safety Critical Railway Application with UML Notation
   Jean-Louis Boulanger (University of Technology of Compiegne, France)

2. Early Development of Graphical User Interface (GUI) in Agile Methodologies
   Caroline Labib, Ehab Hassanein and Osman Hegazy (Cairo University, Egypt)

3. Alternative Methods in Proving Loop Termination
   Tennyson X. Chen and Martin D. Meyer, RTI International, USA

4. Applying Service Oriented Architecture on Enterprise Resource Planning Environment
   Yahia Zakaria Rabie, Ehab Hassanein and Osman Hegazy (Cairo University, Egypt)

DATA STRUCTURE, DATABASE and XML
Tuesday, July 1, 2:30 a.m. – 4:00 p.m., Hershey Room, 2nd Floor
Session Chair: Dr. Min Song, Old Dominion University

1. Metrized Small World Properties Based Data Structure
   V. Krylov, A. Logvinov, A. Ponomarenko (MERA Labs, Russia) and D. Ponomarev
   (MERA Group, Russia)

2. Learning Bayesian Network over Distributed Databases Using Majority-based Method
   Sachin Shetty, Min Song (Old Dominion University, USA), Youjun Yang (Qingdao University, China), and Mary Mathews
   (Old Dominion University, USA)

3. System Entity Structure for XML Meta Data Modeling; Application to the US Climate Normals
   Saehoon Cheon, Doohwan Kim (RTSync Corp., USA) and Bernard P. Zeigler (The University of Arizona, USA)

4:00 p.m. – 4:30 p.m.  COFFEE BREAK
WEB SERVICES and WEB-BASED APPLICATIONS
Tuesday, July 1, 4:30 p.m. – 6:30 p.m., Crocker Room, 2nd Floor
Session Chair: Dr. Ingrid van Coppenhagen, University of South Africa

1. Dynamic Selection of Web Services Using QoS Constraints in BPEL
   Erdogan Dogdu and Omer Mescigil (TOBB University of Economics and Technology, Turkey)

2. Software Security Analysis and Assessment for the Web-Based Applications
   Yong Wang, William M. Lively and Dick B. Simmons (Texas A&M University, USA)

3. Web Software Traffic Characteristics and Failure Prediction Model Selection
   Yong Wang, William M. Lively and Dick B. Simmons (Texas A&M University, USA)

4. Design of a Three-Tiered Visual C# .NET Web Form
   I.H.M. van Coppenhagen (University of South Africa, South Africa)

MOBILE SYSTEMS and APPLICATIONS
Tuesday, July 1, 4:30 p.m. – 6:00 p.m., Hershey Room, 2nd Floor
Session Chair: Dr. Ling Liu, Georgia Institute of Technology

1. Energy-Efficient Processing of Spatial Alarms on Mobile Clients
   Anand Murugappan and Ling Liu (Georgia Institute of Technology, USA)

2. A Novel Architecture for Mobile Distributed Trie Hashing System
   A. Bennaceur (INRIA, France), DE. Zegour and WK. Hidouci, INI, Algerie)

3. An Extended MD-tree with Internal Leaf for Efficient Management of Moving Objects
   Hiroyuki Dekihara (Hiroshima International University, Japan) and Yasuaki Nakamura
   (Technobits Co., Ltd., Japan)

Wednesday, JULY 2, 2008

8:30 a.m. - REGISTRATION – Coffee, Tea, Pastries

MULTIMEDIA and PARALLEL APPLICATIONS
Wednesday, July 2, 9:30 a.m. – 11:00 a.m., Crocker Room, 2nd Floor
Session Chair: Dr. Rym Zalila-Wenkstern, University of Texas at Dallas

1. Load Balancing in PIC Parallel Implementation
   Abdelmageed Elsadek Abdelrazek (College of Business Administration, Saudi Arabia)

2. Domical Cooperative Caching: A Novel Caching Technique for Streaming Media in
   Wireless Home Networks
   Shahram Ghandeharizadeh and Shahin Shayandeh (University of Southern California, USA)

3. Queueing-Theoretic Approach to Software Resource Allocation
   Arash Zaryabi, Torsten Bergander, A. Ben Hamza (Concordia University, Canada) and
   Nolwen Mahe (SAP Labs Canada)