20\textsuperscript{th} International Conference on

Software Engineering
and Data Engineering
(SEDE-2011)

PROGRAM

June 20-22, 2011

Imperial Palace Hotel
Las Vegas, NV USA

Sponsored by

International Society for
Computers and Their Applications

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20th International Conference on Software Engineering and Data Engineering (SEDE-2011)

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In cooperation with Winona State University and University of Texas at Dallas

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Monday, June 20, 2011

MEETING ROOM LOCATED ON 4th FLOOR

8:00 a.m. - 6:00 p.m.  REGISTRATION – Coffee/tea/pastries – FUJI Foyer

8:45 a.m. - 9:00 a.m.  WELCOME – SAMPAN
Rym Zalila-Wenkstern, University of Texas-Dallas, USA
Weili Wu, University of Texas-Dallas, USA

9:00 a.m. – 10:00 a.m.  KEYNOTE SPEAKER
Prof. Shashi Shekhar
McKnight Distinguished Professor, University of Minnesota
“What is Special about Mining Spatial and Spatio-temporal Datasets?”
Location: SAMPAN Room, 4th Floor

10:00 a.m. – 10:30 a.m.  COFFEE BREAK

SESSION 1:
DATABASES AND THEIR APPLICATIONS
Monday, June 20, 10:30 a.m. - 12:30 p.m., SAMPAN Room
Session Chair: Dr. Ying Jin, California State University

1. Partitioned or Non-Partitioned Table Storage? Concepts and Performance for Multi-tenancy in RDBMS
   Oliver Schiller, Andreas Brodt, and Bernhard Mitschang (University of Stuttgart, Germany)

2. Events in an Active Rule-Based Fuzzy XML Database System
   Ying Jin and Hemal J. Mehta (California State University, USA)

3. CAL: A Generic Query and Analysis Language for Data Warehouses
   Ganesh Viswanathan and Markus Schneider (University of Florida, USA)

4. A Generalized Platform for Acquisition and Analysis of Heterogeneous Data Source Views
   Lerina Aversano and Maria Tortorella (University of Sannio, Italy)

12:30 p.m. – 2:00 p.m  LUNCH BREAK ON OWN
SESSION 2:

SOFTWARE ENGINEERING APPLICATIONS I
Monday, June 20, 2:00 p.m. - 4:00 p.m., SAMPAN Room
Session Chair: Dr. Sharad Sharma, Bowie State University

1. **Information Demand Model for Software Unit Reuse**
   Marcus Zinn (University of Plymouth, UK), Klaus Peter Fischer-Hellmann, Alois Schuette (University of Applied Science Darmstadt, Germany), and Andy Phippen (University of Plymouth, UK)

2. **Pattern Matching and Information Extraction in a Software System for a Battlefield Environment**
   Sharad Sharma and Shamal Shete (Bowie State University, USA)

   Tazar Hussain, Abdullah Sharaf Alghamdi, Abdulhameed Alelaiwi, and Abdul Haseeb (King Saud University, Saudi Arabia)

4. **Integration Tester for Component-Based Software**
   Abeer Hakeem, Fathy Eissa (King Abdulaziz University, Saudi Arabia)

4:00 p.m. – 4:30 p.m. Coffee Break

SESSION 3:

APPLICATIONS IN SOFTWARE and DATA ENGINEERING I
Monday, June 20, 4:30 p.m. - 6:00 p.m., SAMPAN Room
Session Chair: Dr. Narayan Debnath, Winona State University

1. **A Publish/Subscribe System to Realize Service Oriented Architecture in MANET**
   Prasenjit Choudhury and Subrata Nandi (National Institute of Technology, India) and Narayan C. Debnath (Winona State University, USA)

2. **Adaptive Slot Assignment Over Wireless Sensor Networks**
   Thibault Bernard and H. Fouchal (URCA, France)

3. **A Strategy Based on LSP for the Evaluation of Specific Languages for Business Process Modeling**
   Narayan Debnath (Winona State University, USA), Carlos Salgado, Mario Peralta, Daniel Riesco, Mario Beron, German Montejano, and Lorena Baigorria (Universidad Nacional de San Luis, Argentina)

4. **Metrics for Evaluation of Workflow Models: An Experiment for Validation**
   Narayan Debnath (Winona State University, USA), Mario Peralta, Carlos Salgado, German Montejano, Daniel Riesco, and Mario Beron (Universidad Nacional de San Luis, Argentina)
Tuesday, June 21, 2011

8:30 a.m. – 6:30 p.m. REGISTRATION – Coffee/tea/pastries – FUGI Foyer, 4 th Floor

9:00 a.m. – 10:00 a.m. KEYNOTE SPEAKER
Prof. Dewayne Perry
Motorola Regents Chair in Electrical and Computer Engineering
University of Texas at Austin
“A Unifying Foundation for Software Engineering”
Location: SAMPAN Room, 4 th Floor

10:00 a.m. – 10:30 a.m. COFFEE BREAK

DATA STRUCTURES AND THEIR APPLICATIONS
Tuesday, June 21, 10:30 a.m. - 12:00 p.m., SAMPAN Room
Session Chair: Dr. Gregory Kapfhammer, Allegheny College

1. Ask and You Shall Receive: Empirically Evaluating Declarative Approaches to Finding Data in Unstructured Heaps
William F. Jones and Gregory M. Kapfhammer (Allegheny College, USA)

2. Fast Attribute-based Unsupervised and Supervised Table Clustering using P-Trees
Arjun G. Roy, Matthew Piehl, Arijit Chatterjee, Mohammad K. Hossain, Bryan Mesich, Tingda Lu, Greg Wettstein, Amal Perera, and William Perrizo (North Dakota State University, USA)

3. An Extended Technique for R-tree to Manage Multiple Type Objects
Hiroyuki Dekihara (Hiroshima International University, Japan) and Yasuaki Nakamura (Technobits Co., Ltd., Japan)

12:00 p.m. – 2:00 p.m. CONFERENCE LUNCHEON AND BEST PAPER AWARD
LOCATION: PEARL Room, 4 th Floor
SOFTWARE ENGINEERING APPLICATIONS II
Tuesday, June 21, 2:15 p.m. - 4:15 p.m., SAMPAN Room
Session Chair: Dr. Salam Salloum, California State Polytechnic University

1. Composition of Heterogeneous Web Services for Converting Legacy Codes to SOA based Applications
   Shrabani Mallick, Namo Narayan Meena, Dharmendra K. Yadav, Dharmender Singh Kushwaha (Motilal Nehru National Institute of Technology, India)

2. Angel Blaze Media Player for Children with Client/Server File Sharing
   Jingxin Han and Sharad Sharma (Bowie State University, USA)

3. Algorithms for Generating a Minimum Set of Paths for all Du-Paths Coverage
   Salam Salloum and Lei Liu (California State Polytechnic University, USA)

4. Development of Tsunami Evacuation Simulation of Banda Aceh City Planning
   Muzailin Affan, Agussabti (Syiah Kuala University, Indonesia), Yozo Goto (University of Tokyo, Japan), Taufic Fuadi Abidin (Syiah Kuala University, Indonesia), and Shunichi Koshimura (Tohoku University, Japan)

4:15 p.m. – 4:30 p.m. Coffee Break

APPLICATIONS IN SOFTWARE AND DATA ENGINEERING II
Tuesday, June 21, 4:30 p.m. - 6:00 p.m., SAMPAN Room
Session Chair: Dr. Narayan Debnath, Winona State University

1. Maximum Likelihood Function used to Calculate Confidence of Association Rules in Market Baskets
   Arijit Chatterjee and William Perrizo (North Dakota State University, USA)

2. Business-Object Oriented Requirements Analysis for Large Scale Information System
   Anirban Sarkar (National Institute of Technology-Durgapur, India) and Narayan C. Debnath (Winona State University, USA)

   Sada Narayanappa (Jeppesen, Inc., USA), Wan D. Bae (University of Wisconsin-Stout, USA), Shayma Alkobaisi (United Arab Emirates University, UAE) and Narayan C. Debnath (Winona State University, USA)
DATA ENGINEERING APPLICATIONS
Wednesday, June 22, 8:30 a.m. - 10:00 a.m., SAMPAN Room
Session Chair: Dr. Wei Hao, Northern Kentucky University

1. Achieving Better Cloud Access Experience with Server Virtualization
   Wei Hao (Northern Kentucky University, USA), Jicheng Fu (University of Central
   Oklahoma, USA) and Pochara Prapatanant, Nathan Dixon (Northern Kentucky
   University, USA)

2. Multiple Image Secret Sharing Scheme
   Sesha Pallavi Indrakanti and Venkata Vinay Pragada (GVP Degree College
   (Autonomous), India) and Avadhani P.S (Andhra University College of Engineering
   (Autonomous), India)

3. Application of Knowledge Engineering in Strip Layout Design of Progressive Dies
   Alan Lin and Dean Sheu (National Taiwan University of Science and Technology,
   Taiwan)

10:00 a.m. – 10:15 a.m. Coffee Break

APPLICATIONS IN SOFTWARE AND DATA ENGINEERING III
Wednesday, June 22, 10:15 a.m. - 11:45 p.m., SAMPAN Room
Session Chair: Dr. Cyrus Azarbod, Minnesota State University-Mankato

1. Re-tain-o-logy: A Comprehensive Model for the Development of Early-Warning and
   Student Retention Systems
   Hossein Hakimzadeh (Indiana University South Bend, USA), Cyrus Azarbod (Minnesota
   State University, USA), and Robert Batzinger (Indiana University South Bend, USA)

2. Predicting a Patient Recovery Timeline from a Total Knee Replacement Using Fuzzy Data
   Mining During Physical Therapy
   Robert Azarbod, Cyrus Azarbod and Mahburbur Syed (Minnesota State University
   Mankato, USA)

3. RSS-ARM: Reduced Search Space Based Technique for Association Rule Mining
   Ahmed M. Ghanem, Mahmoud S. AwadAllah (Suez Canal University, Egypt) and
   Hamed M. Sallam (Sinai University, Egypt and Minnesota State University Mankato,
   USA)