24th International Conference on

Software Engineering
and Data Engineering
(SEDE-2015)

PROGRAM

October 12-14, 2015

Hilton San Diego / Harbor Island
San Diego, California, USA

Sponsored by

International Society for
Computers and Their Applications

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24th International Conference on
Software Engineering and Data Engineering
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Sunday, October 11, 2015

4:00 p.m. – 7:00 p.m.      PRE-REGISTRATION – Skyline/Lindbergh Lobby, 9th floor
Monday, October 12, 2015

8:00 a.m. – 4:00 p.m. REGISTRATION – Skyline/Lindbergh Lobby, 9th floor
8:00 a.m. – 9:00 a.m. Coffee, Tea and Pastries - Skyline/Lindbergh Room, 9th floor

8:40 a.m. – 9:00 a.m. WELCOME - Skyline/Lindbergh Room, 9th floor
Gongzhu Hu, CAINE Conference Chair
Frederick Harris, SEDE Conference Chair

9:00 a.m. – 10:00 a.m. KEYNOTE SPEAKER
Professor Yi Pan
Georgia State University
"Parallel Computing on Clouds -- Issues and Solutions?"
Location: Skyline/Lindbergh Room, 9th floor

10:00 a.m. – 10:30 a.m. COFFEE BREAK - Lindbergh Room, 9th floor

10:00 a.m. – 12:00 p.m. SOFTWARE ENGINEERING I
Session Chair: Xudong He (Florida International University)

1. Using Agent Technology for Security Testing of WEB Based Applications
   Muhammad Imran, Fathy Eassa, and Kamal Jambi (King Abdulaziz University, Saudi Arabia)

2. Selecting Statistically Significant Independent Variables for Component-based Software Development Effort Prediction
   Cuauhtémoc López-Martín, Arturo Chavoya, María Elena Meda-Campaña (Universidad de Guadalajara, México)

3. A Formal Modeling Method for Cost-Aware Service Composition
   Fangxiong Xiao, Huaqing Min, Xu Bo (South China University of Technology) and Xudong He (Florida International University)

4. Test Case Selection using Software Complexity and Volume Metrics
   Shadi Banitaan, Kevin Daimi, Yujun Wang (University of Detroit Mercy) and Mohammed Akour (Yarmouk University, Jordan)

12:00 p.m. – 1:30 p.m. LUNCH BREAK ON OWN

Sunday, October 11, 2015
TUTORIAL: AUTOMATED ASSESSMENT TOOLS
Monday October 12, 1:30 p.m. – 3:00 p.m., Lindbergh Room (9th Floor)

Presenters: Professor Barton P. Miller (University of Wisconsin)
Professor Elisa Heymann (Autonomous University of Barcelona)

The tutorial will start with basic background material about how software assessment tools work, the capabilities and limitations of such tools. It will then focus on a selection of both commercial and open source tools for C/C++ and Java, and demonstrate how to apply them to sample programs with known flaws. It will conclude with a live demonstration.

3:00 p.m. – 3:30 p.m. COFFEE BREAK - Lindbergh Room, 9th floor

SOFTWARE ENGINEERING AND APPLICATIONS
Monday October 12, 3:30 p.m. – 5:00 p.m., Lindbergh Room (9th Floor)
Session Chair: Narayan Debnath (Winona State University)

1. Determining Emotion through Machine Learning
   Christopher Bischke and Narayan Debnath (Winona State University)

2. New Structure for Agile Team Sitting
   Azza Elneil Osman Abdalla and Hisham Mohammad Abushama (University of Khartoum, Sudan)

3. A Software Environment for Watershed Modelling
   Moinul Hossain, Sergiu Dascalu and Frederick Harris (University of Nevada, Reno)

4. GUI – Enhanced Activity Diagrams with Application to the Design of AVISTED
   Likhitha Ravi, Sergiu Dascalu and Frederick Harris (University of Nevada, Reno)
8:00 a.m. – 4:00 p.m.  REGISTRATION – Skyline/Lindbergh Lobby, 9th floor
8:00 a.m. – 9:00 a.m.  Coffee, Tea and Pastries - Skyline/Lindbergh Room, 9th floor

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

Dr. Yantao Shen
University of Nevada, Reno
“Integrating Custom-built Software Interfaces with Hardware Platforms for Real-time Data Visualization and Analysis in Industrial and Biomedical Engineering Applications”

Location: Skyline/Lindbergh Room, 9th floor

10:00 a.m. – 10:30 a.m.  COFFEE BREAK - Lindbergh Room, 9th floor

SESSION C4:

DATA ENGINEERING I

Tuesday October 13, 10:30 a.m. - 12:00 p.m., Lindbergh Room (9th Floor)
Session Chair: Aspen Olmsted (College of Charleston)

1. Investigating Manifold Neighborhood size for Nonlinear Analysis of LIBS Amino Acid Spectra
   Piyush Kumar Sharma, Gary Holness, Poopalasingam Sivakumar, Yuri Markushin, and Noureddine Melikechi (Delaware State University)

   Ian P. Kane and Ahmad R. Hadaegh (California State University, San Marcos)

3. Fresh, Atomic, Consistent and Durable (FACD) Data Integration Guarantees
   Aspen Olmsted (College of Charleston)

4. An Algorithm for Selecting Meaningful Dimensions
   Yong Shi and Swathi Ganji (Kennsaw State University)

12:00 p.m. – 1:30 p.m.  CONFERENCE LUNCHEON AND BEST PAPER AWARDS

LOCATION: Spinnaker Room and Patio (1st floor)
SOFTWARE ENGINEERING II
Tuesday October 13, 1:30 p.m. – 3:00 p.m., Lindbergh Room (9th Floor)
Session Chair: Ajay Bandi (Northwest Missouri State University)

1. Quality Measurements for Legacy to SOA Migration
Ayman Massoud (Otto von Guericke University, Germany)

William Flageol, Mourad Badri and Linda Badri (University of Quebec, Canada)

3. Assessing Code Decay: A Data-driven Approach
Ajay Bandi (Northwest Missouri State University), Edward B. Allen and Byron J. Williams (Mississippi State University)

4. Industrial Validation of an Approach to Measure Software Quality
Reza Mirsalari (École Polytechnique de Montréal), Mehdi Aftahi (Technology Evaluation Centers) and Pierre N. Robillard (École Polytechnique de Montréal)

3:00 p.m. – 3:30 p.m.  COFFEE BREAK - Lindbergh Room, 9th floor

DATA ENGINEERING II
Tuesday October 13, 3:30 p.m. – 5:00 p.m., Lindbergh Room (9th Floor)
Session Chair: Rashed Salem (Menofia University)

1. Sentiment Analysis Conducted on Students’ Evaluation of Courses
Karamveer Yadav, Andrew Backes and Kasi Periyasamy (University of Wisconsin, La Crosse)

2. Understanding Factors Influencing the Citation Count of Networking Conference Papers
Utkarsh Goel, Clemente Izurieta, and Mike P. Wittie (Montana State University)

3. Prediction of Stakeholder Classification and Prioritization Based on Rough Set Theory
Asmaa Haroun, Rashed Salem and Hatem Mohamed Abdul-Kader (Menofia University)

4. Affective Computing for Social Networking Issues
Prerana Larijekar (California State University, East Bay)
8:00 a.m. – 12:00 p.m. REGISTRATION – Skyline/Lindbergh Lobby, 9th floor
8:00 a.m. – 9:00 a.m. Coffee, Tea and Pastries – Lindbergh Room, 9th floor

SOFTWARE APPLICATIONS I
Wednesday October 14, 8:30 a.m. - 10:00 a.m., Lindbergh Room (9th Floor)
Session Chair: Wenying Feng (Trent University)

1. An Experimental Evaluation of Apple Siri and Google Speech Recognition
   Mehdi Assefi, Guangchi Liu, Clemente Izurieta and Mike Wittie (Montana State University)

2. Design of a Cloud-based Bike-fleet POI Touring Service Platform
   Hao-Hsiang Ku, Miao Ouyang (Hwa-Hsia University of Technology) and Si-Yuan Haung (National Pingtung University of Science and Technology)

3. Predictive Real Estate Multiple Listing System Using MVC Architecture and Linear Regression
   Timothy Oladunni and Sharad Sharma (Bowie State University)

4. SMOTE with Distance Threshold for Machine Learning Applied to Real-Time Bidding for Online Advertising
   Ben McInroy, Wenying Feng (Trent University) and Gongzhu Hu (Central Michigan University)

10:00 a.m. – 10:30 a.m. COFFEE BREAK - Lindbergh Room, 9th floor

SOFTWARE APPLICATIONS II
Wednesday October 14, 10:30 a.m. - 12:00 p.m., Lindbergh Room (9th Floor)
Session Chair: Sharad Sharma (Bowie State University)

1. Improving Energy Consumption and Performance of Mobile Applications Using the Cloud
   John Newman and Wei Hao (Kentucky University)

2. Enhanced Dependability Rules Generation Approach for Data Cleaning in Medical Applications
   Asmaa Abdo, Rashed Salem and Hatem Abdul-Kader (Menoufia University, Egypt)

3. A Comparative Study on Cloud-based Agile Tools
   Mohsen Taheri and S. Masoud Sadjadi (Florida International University)

4. Mobile App for increasing Productivity and Health at Workplace
   Sharad Sharma, Sheeba Nadarajah, Diliorah Arah and Shanmukha Jerripothula (Bowie State University)

12:00 p.m. – 1:30 p.m. LUNCH BREAK ON OWN
1. **Preliminary Study on Assessing Software Defects Using Nano-Pattern Detection**
   Ajay Deo and Byron Williams (Mississippi State University)

2. **Design Adaptability for Multilingual Mobile Application Software**
   Paniti Netinant (Rangsit University, Thailand)

3. **A DSL for Reducing the Accidental Complexities of using Program Transformation Engines**
   Songqing Yue (University of Central Missouri) and Jeff Gray (University of Alabama)

4. **OpenC: Extending C Programs with Computational Reflection**
   Songqing Yue (University of Central Missouri) and Jeff Gray (University of Alabama)

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5. **Apriori(ls): Scalable Frequent Itemset Mining At Low Support Levels**
   Neal Clark and Yvonne Coady (University of Victoria)

6. **Applying Big Data Analytics on Integrated Cybersecurity Datasets**
   Lakshmi Sindhuri Juturu, Susan Urban (Texas Tech University) and Bryan Stearns
   (University of Michigan)

7. **Environment for Datasets Processing and Visualization Using SciDB**
   Rui Wu, Sergiu Dascalu and Frederick Harris (University of Nevada, Reno)