27th International Conference on

Software Engineering and Data Engineering (SEDE-2018)

PROGRAM

October 8-10, 2018

Holiday Inn Downtown Superdome
New Orleans, LA 70112, USA

Sponsored by

ISCA

International Society for Computers and Their Applications

27th International Conference on

Software Engineering and Data Engineering
(SEDE-2018)

SPONSOR

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8:00 a.m. – **3:30 p.m.**   **Registration, 8th Floor Lobby.**
8:00 a.m. – **9:00 a.m.**   **Coffee and Pastries, 8th Floor Lobby.**

8:40 a.m. – **9:00 a.m.**   **WELCOME, Room: Bayou Ballroom A, Floor 8**

Gongzhu Hu, Yan Shi, and Takaati Goto, CAINE Chairs
Fred Harris, Sergiu Dascalu, and Sharad Sharma, SEDE Chairs

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

Dr. Qiang Zhu
Department of Computer and Information Science, University of Michigan – Dearborn, Dearborn, USA
"Similarity Searches on Non-Ordered Discrete Data for Emerging Computer Applications: Why and How"

Location: Bayou Ballroom A, Floor 8
Session Chair: Dr. Takaaki Goto, Ryutsu Keizai University, Japan

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10:00 a.m. – 10:30 a.m. COFFEE BREAK, 8th Floor Lobby.

SESSION 1:

SOFTWARE ENGINEERING I
Monday, October 8, 10:30 a.m. - 12:00 p.m., Room: Bayou Ballroom B, Floor 8
Session Chair: Frederick C. Harris, Jr. (University of Nevada, Reno, USA)

1. **Sentiment Analysis of Software Bug Related Commit Messages**
    Md Rakibul Islam and Minhaz F. Zibran (University of New Orleans)

2. **Generalized Software Interface for CHORDS**
    Pattaphol Jirasessakul, Zachary Waller, Paul Marquis, Vinh Le, Connor Scully-Allison, Frederick C. Harris Jr., Sergiu Dascalu and Scotty Strachan (University of Nevada, Reno)

3. **Android Malware Detection Using Stacked Generalization**
    Md. Shohel Rana, Charan Gudla and Andrew H. Sung (The University of Southern Mississippi)

4. **Building Evacuation Using Microsoft HoloLens**
    James Stigall, Sri Teja Bodempudi, Sharad Sharma (Bowie State University), David Scribner, Jock Grynovicki and Peter Grazaitis (Army Research Laboratory)

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

	DATA ENGINEERING I
Session 2:	Monday, October 8, 1:30 p.m. – 3:00 p.m., Room: Bayou Ballroom B, Floor 8
	Session Chair: Sharad Sharma (Bowie State University, USA)

1. **A Graph Database Approach for XACML Role-Based Access Control Implementation**
   Arundhati Wahane and Ying Jin (California State University, Sacramento)

2. **An Online Approach for DNA Sequencing Error Correction via Disk Based Index**
   Yarong Gu, Qiang Zhu and Sakti Pramanik (University of Michigan)

3. **Trust Issues in Cybersecurity and Autonomy**
   Aakanksha Rastogi and Kendall Nygard (North Dakota State University)

4. **Testing Different Methods for Arbitrary 3D Point Selection in empty space**
   Jacob Stanish and Bradford Towle Jr. (Florida Polytechnic University)

3:00 p.m. – 3:30 p.m. COFFEE BREAK, 8th Floor Lobby.

	VIRTUAL REALITY & SOFTWARE ENGINEERING
SESSION 3:	Monday, October 8, 3:30 p.m. – 5:00 p.m., Room: Bayou Ballroom B, Floor 8
	Session Chair: Kendall Nygard (North Dakota State University, USA)

1. **Let's VR: A Multiplayer Framework for Virtual Reality**
   Kurt Andersen, Alex Hansen, Brittany Sievert, Jalal Kiswani, Sergiu Dascalu and Frederick C. Harris Jr. (University of Nevada, Reno)

2. **AssemblyVR: An Immersive Virtual Reality Environment for Concept Design**
   James Stigall, Revanth Bhaskar and Sharad Sharma (Bowie State University)

3. **Simulating an Unknown Environment with an Integrated Physical and Virtual Space**
   Esteban Segarra and Bradford Towle Jr. (Florida Polytechnic University)

4. **Evaluation of GTI modules based on usability and likeability**
   Sarika Rajeev and Sharad Sharma (Bowie State University)

8:00 a.m. – 3:30 p.m.   **REGISTRATION – 8th Floor Lobby.**
8:00 a.m. – 9:00 a.m.   **Coffee, Tea and Pastries - 8th Floor Lobby.**

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

Dr. Scotty Strachan
Office of Information Technology and College of Science, University of Nevada, Reno
"Cyberinfrastructure and the Critical Role of Engineering Partnerships for Science Discovery"

Location: Room: Bayou Ballroom A, Floor 8
Session Chair: Dr. Sergiu Dascalu, University of Nevada, Reno

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10:00 a.m. – 10:30 a.m. COFFEE BREAK, 8th Floor Lobby.

SESSION 4:

SOFTWARE ENGINEERING II
Tuesday, October 9, 10:30 a.m. - 12:00 p.m., Room: Bayou Ballroom B, Floor 8
Session Chair: Gahangir Hossain (Texas A&M University-Kingsville, USA)

1. **A Method for Handling Multi Axis Input for a Motion Based Flight Simulator**
    Alex Redei and Sergiu Dascalu (University of Nevada, Reno)

2. **Towards an Efficient Just-In-Time Compiler**
    Indraneel Golthi, Sruthi Ganesan Valli and Gahangir Hossain (Texas A&M University-Kingsville)

3. **Using Compiler to Build Strict Dependency Tool**
    Varma Kutcharlapati, Divyakanth Koppolu, Gowthambaalaji Venkataraman and Gahangir Hossain (Texas A&M University-Kingsville)

4. **Overlay: An Educational Disc Covering Puzzle Game**
    Ryan Devaney, Sanya Gupta, Vinh Le, Connor Scully-Allison, Frederick C. Harris Jr. and Sergiu Dascalu (University of Nevada, Reno)

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

LOCATION: Room: JAZZ/DIXIELAND

SESSION 5:	**DATA ENGINEERING II** Tuesday, October 9, 1:30 p.m. – 3:00 p.m., Room: Bayou Ballroom B, Floor 8 Session Chair: Ajay Bandi (Northwest Missouri State University, USA)

1. **Data Mining in-IDE Activities: Why Software Developers Fail**
   Naw Safrin Sattar, Md Abdul Motaleb Faysal, Minhaz Zibran, Shaikh Arifuzzaman and Md Rakibul Islam (University of New Orleans)

2. **Trusted Validity: Combating Fake News with Distributed Ledger Technology**
   Lamar S. Taylor (Bowie State University)

3. **A Prototypical Reference Application of an IVIS4BigData Infrastructure supporting Anomaly Detection on Car-to-Cloud Data**
   Marco X. Bornschlegl, Thoralf Reis and Matthias L. Hemmje (University of Hagen)

4. **Multilingual Extension of Dependency Parsing and Annotation**
   H. M. Raine Ahmed, Rushil Thakkar and Gahangir Hossain (Texas A&M University-Kingsville)

3:00 p.m. – 3:30 p.m. COFFEE BREAK, 8th Floor Lobby.

SESSION 6:	**SOFTWARE ENGINEERING III** Tuesday, October 9, 3:30 p.m. – 5:00 p.m., Room: Bayou Ballroom B, Floor 8 Session Chair: K. Vidyasankar (Memorial University of Newfoundland, Canada)

1. **An Empirical Study of the Relationships between Code Readability and Software Complexity**
   Duaa Alawad, Manisha Panta, Minhaz Zibran and Md Rakibul Islam (University of New Orleans)

2. **Mobile Usability Testing: Gathering Evidence for Designing User Interfaces for Emergency Disaster Management Systems**
   Ajay Bandi, Abdelaziz Fellah, Harish Bondalapati and Mark Corson (Northwest Missouri State University)

3. **A Mechanism for Secure Delivery of Bare Machine Computing Software**
   Robert G. Eyer, Ramesh K. Karne and Alexander L. Wijesinha (Towson University)

4. **Privacy Awareness on Social Media through Gamification**
   Kambiz Ghazinour, Ken Messner (Kent State University), Grant Myers (Brown University), Sean Scarnecchia and David Selinger (Kent State University)

8:00 a.m. – 11:00 a.m.   REGISTRATION – 8th Floor Lobby.
8:00 a.m. – 9:00 a.m.   Coffee, Tea and Pastries - 8th Floor Lobby.

SESSION 7:

SOFTWARE ENGINEERING IV
Wednesday, October 10,8:30 am–10:00 am, Room: Bayou Ballroom B, Floor 8
Session Chair: Maria Tortorella (University of Sannio, Italy)

1. **The Instability of Software Projects: The Role of Private and Public Components**
    Lerina Aversano and Maria Tortorella (University of Sannio)

2. **Atomicity of Executions in Fog Computing Architectures**
    Krishnamurthy Vidyasankar (Memorial University of Newfoundland)

3. **Simulating a Passenger Awareness System for an Autonomous Car with an Augmented Reality Device**
    Bradford Towle Jr. and Nigel Williams (Florida Polytechnic University)

10:00 a.m. – 10:30 a.m. COFFEE BREAK, 8th Floor Lobby.