29th International Conference on

Software Engineering and Data Engineering (SEDE-2020)

PROGRAM

October 19, 2020

Virtual Conference Online

Sponsored by



International Society for Computers and Their Applications

P. O. Box 1124 Winona, MN 55987 Phone: (507) 458-4517; E-mail: isca@isca-hq.org; website: www.isca-hq.org

29th International Conference on

Software Engineering and Data Engineering (SEDE-2020)

SPONSOR

	International Society for Computers and Their Applications (ISCA)
General Chairs:	Dr. Frederick C. Harris Jr., University of Nevada, Reno, USA
Program Chairs:	Dr. Alex Redei, Central Michigan University, Mount Pleasant MI Dr. Rui Wu, East Carolina University, Greenville, NC, USA

International Program Committee

Tamer Aldwairi Saleh Alnaeli Maral Azizi Ajay Bandi Antoine Bossard Cesar A. Collazos Silvia Cristea Stuart Cunningham Sergiu Dascalu Liliana Dobrica Brian Eddy Takaaki Goto Jeff Gray Vic Grout Xudong He Nic Herndon Alan Hevner Filip Jagodzinski Norbert Jastroch Jalal Kiswani Gordon Lee Siming Liu Fulvio Lizano Madriz Cristina Luca Muhanna Muhanna Tin Nguyen Timothy Oladunni Juan Quiroz Patricia Paderewski-Rodriguez **Claudia Raibulet** Carlos Rivero Yan Shi Pierre Tiako Stefan Trausan-Matu **Bingyang Wei** Christoph Wunck Lei Yang Feng Yu

Temple University, USA University of Wisconsin-Stout, USA East Carolina University, USA Northwest Missouri State University, USA Kanagawa University, Japan University of Cauca, Columbia Anglia Ruskin University, England, UK Manchester Metropolitan University, UK University of Nevada, Reno, USA University Politehnica of Bucharest, Romania University of West Florida, USA Toyo University, Japan University of Alabama, USA Glyndwr University, Wales, UK Florida International University, USA East Carolina University, USA University of South Florida, USA Western Washington University, USA MET Communications GmbH, Germany Al Hussein Technical University, Jordan San Diego State University, USA Missouri State University, USA National University of Costa Rica Anglia Ruskin University, Cambridge, UK Luminus Education, Jordan University of Nevada, Reno, USA University of the District of Columbia, USA Macquarie University, Sydney, Australia University of Granada, Spain University of Milano-Bicocca, Italy Rochester Institute of Technology, USA University of Wisconsin - Platteville, USA Tiako University, USA University Politehnica of Bucharest, Romania Texas Christian University, USA Emden/Leer University of Applied Sciences, Germany University of Nevada, Reno, USA Youngstown State University, USA

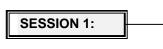
Monday, October 19, 2020

8:55 a.m. - 9:00 a.m. WELCOME By SEDE Organizers

Fred Harris, Alex Redei, and Rui Wu, SEDE Chairs

9:00 a.m. – 10:00 a.m.	KEYNOTE SPEAKER	
Dr. Haroon Stephen		
Department of Civil and Environmental Engineering and Construction, University of Nevada, Las Vegas, USA		
"Challenges and Opportunities in Remote and In-situ Sensing: A Data and Software Perspective"		
Session Chair: Dr. Frederick C. Ha	rris, Jr., University of Nevada, Reno, USA	

10:00 a.m. – 10:05 a.m. 5 Minute Break



SOFTWARE ENGINEERING I

Monday, October 19, 2020, 10:05 a.m. - 11:05 p.m. Session Chair: Frederick C. Harris, Jr. (University of Nevada, Reno, USA)

- 1. Cloud Applications Adoption: User Study Survey From Industry and Academia Jalal Kiswani, Sergiu Dascalu and Frederick Harris
- 2. Controls and Novelty on Digital Platforms: Two Case Studies Onkar Malgonde and Alan Hevner
- 3. Cognitive Informatics in Emergency Disaster Management Systems Ajay Bandi and Aziz Fellah
- 11:05 a.m. 11:10 a.m. 5 Minute Break



DATA ENGINEERING I

Monday, October 19, 2020, 11:10 a.m. - 12:30 p.m. Session Chair: Dr. Alex Redei (Central Michigan University, USA)

- 1. Detection of unknown galaxy types in large databases of galaxy image Venkata Siva Kumar Margapuri, Lior Shamir and Basant Thapa
- 2. Preprocessing Method Comparisons For VGG16 Fast-RCNN Pistol Detection Jiahao Li, Charles Ablan, Rui Wu, Shanyue Guan and Jason Yao
- 3. An O(nlogn/logw) Time Algorithm for Ridesharing Yijie Han and Chen Sun
- 4. A Blueprint for a Trustworthy Health Data Platform Encompassing IoT and Blockchain Technologies

Dennis Przytarski, Christoph Stach, Clémentine Gritti and Bernhard Mitschang

12:30 p.m. – 12:45 p.m. 15 Minute Break



SOFTWARE ENGINEERING II

Monday, October 19, 2020, 12:45 p.m. – 1:25 p.m. Session Chair: Dr. Rui Wu (East Carolina University, USA)

- 1. Techniques for Using Virtual Reality Simulations for Self-Defense Skill Development John Apo and Alexander Redei
- 2. Chaotic Creations

Christopher Lewis, Natalie Arnold, Leah Kramer, Terra Williams, Sergiu Dascalu and Fred Harris

1:25 p.m. – 1:30 p.m. 5 Minute Break



DATA ENGINEERING II

Monday, October 19, 2020, 1:30 p.m. - 2:30 p.m. Session Chair: Venkatasivakumar Margapuri (Kansas State University, USA)

- 1. A Project Tracking Tool for Scrum Projects with Machine Learning Support for Cost Estimation Kasi Periyasamy and Joshua Chianelli
- 2. Ameliorating Accuracy of a Map Navigation When Dealing with Different Altitude Traffics that Share Exact Geolocation

Thitivatr Patanasakpinyo

3. Multi-Objective Regression Test Selection Yizhen Chen and Mei-Hwa Chen

2:30 p.m. Best Paper Award Announcement