30th International Conference on
Software Engineering
and Data Engineering
(SEDE-2021)

PROGRAM

October 11, 2021

Virtual Conference Online

Sponsored by

International Society for
Computers and Their Applications

278 Mankato Ave. #220
Winona, MN 55987
E-mail: isca@isca-hq.org; website: www.isca-hq.org
30th International Conference on Software Engineering and Data Engineering (SEDE-2021)

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International Society for Computers and Their Applications (ISCA)

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Lei Yang  University of Nevada, Reno, USA
Feng Yu  Youngstown State University, USA
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. Nic Herndon
Department of Computer Science,
East Carolina University, Greenville, USA

DATA SCIENCE TO MITIGATE GLOBAL WARMING EFFECTS
Session Chair: Dr. Frederick C. Harris, Jr., University of Nevada, Reno, USA

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

SOFTWARE ENGINEERING I
Monday, October 11, 2021, 10:05 a.m. – 11:05 p.m.
Session Chair: Frederick C. Harris, Jr. (University of Nevada, Reno, USA)

1. Translating a Large Software from C# to C++: An Experience Report
   Edgar Gabriel, Nicholas Roos Biddle, Shane Tran Whitmire, and Allen Casey

2. Developing a Google Chrome Extension for Detecting Phishing Emails
   Hongkai Chen and Mohammad Hossain

3. AnthroFace: Requirements, Design, and Implementation
   Skylar Glock, Kealia Perrine, Henry Sturm, Gabielle Talavera, Mari Trombley, Cortney Hulse, Kyra E. Stull, and Frederick C. Harris, Jr.

11:05 a.m. – 11:10 a.m.  5 Minute Break

DATA ENGINEERING I
Monday, October 11, 2021, 11:10 a.m. – 12:30 p.m.
Session Chair: Dr. Alex Redei (Central Michigan University, USA)

1. Implementation of BERT based machine learning model to extract cancer–miRNA relationship from research literature
   Arunprasad Sundharam and Qin Ding

2. Separated Feature Learning for Music Composition Using Memory-Based Neural Networks
   Imad Rahal, Ryan Strelow, Jeremy Iverson, and Katherine Mendel

3. Estimating Attention Level from Blinks and Head Movement
   Masaaki Goto, Tetsuo Tanaka, and Kazunori Matsumoto

4. Model Checking Token-Based Mutual Inclusion and Mutual Exclusion Algorithms
   Kai Zhao, Venkat Margapuri, and Mitchell Neilsen

12:30 p.m. – 12:45 p.m.  15 Minute Break
SOFTWARE ENGINEERING II
Monday, October 11, 2021, 12:45 p.m. – 2:05 p.m.
Session Chair: Dr. Rui Wu (East Carolina University, USA)

1. **VS-TAP: Veteran Services Tracking and Analytics Program**
   Jonathon Hewitt, Daniel Hall, Christopher Parks, Payton Knoch, Sergiu Dascalu, Devrin Lee, Nikkolas J. Irwin, and Frederick C Harris, Jr

2. **Automated Generation of Stand-Alone Source Codes for Software Libraries**
   Lucas Machi, Henry L. Carscadden, Chris J. Kuhlman, Dustin Machi, and S. S. Ravi

3. **DBKnot A Transparent and Seamless, Pluggable, Tamper Evident Database**
   Islam Khalil, Sherif El-Kassas, and Karim Sobh

4. **Comparing Blockchain Platforms for Smart Contracts: A Preliminary Framework**
   Giuseppe A. Di Lucca, Maria Tortorella

2:05 p.m. – 2:10 p.m.  5 Minute Break

DATA ENGINEERING II
Monday, October 11, 2021, 2:10 p.m. - 3:30 p.m.
Session Chair: ????

1. **Automated Light System in Smart Home for Elderly and Disabled People Using Mosquitto Server**
   Paniti Netinant, Kawinna Sakornthai, and Meennapa Rukhiran

2. **Using Virtual Reality and Machine Learning Techniques to Visualize the Human Spine**
   Lin Hall, Ping Wang, Grayson Blankenship, Emmanuel Zenil Lopez, Chris Castro, Zhen Zhu, and Rui Wu

3. **Studying the COVID-19 Impact on the Antarctic Glacier Melting Rate**
   Mason Chen, and Charles Chen

4. **Optimized Bootstrap Sampling for σ-AQP Error Estimation: A Pilot Study**
   Semih Cal, En Cheng, and Feng Yu

2:30 p.m. – 2:35 p.m.  Best Paper Award Announcement

Note: All times are Pacific Daylight PDT