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CSCI 2022 CONFERENCE SCHEDULE

The 2022 International Conference on Computational
Science and Computational Intelligence

https://www.american-cse.org/csci2022/

December 14-16, 2022
Luxor (an MGM Resorts International), 3900 Las Vegas Blvd South,
Las Vegas, Nevada 89119, USA

Note that the title of presentations and authors' names that appear in this schedule were extracted from the papers that were submitted to the EVALUATION web site. The official published proceedings/book will have any and all changes/revisions that authors may have done to the title and/or authors lists in the final version of their manuscripts.

ALL TIMES ARE GIVEN IN TERMS OF USA PACIFIC TIME ZONE.

REGISTRATIONS / PACKET PICKUP:

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December 13, 2022 (Tuesday):     03:00pm - 06:00pm (Lotus Ballrooms 2 & 3)
December 14, 2022 (Wednesday):   07:00am - 05:00pm (Lotus Ballrooms 2 & 3)
December 15, 2022 (Thursday):    07:00am - 05:00pm (Lotus Ballrooms 2 & 3)
December 16, 2022 (Friday):      07:00am - 05:00pm (Lotus Ballrooms 2 & 3)
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REFRESHMENTS/BREAKFASTS/RECEPTION:

December 14, 2022 (Wednesday):
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    CONTINENTAL BREAKFAST:       07:00am - 08:00am (Lotus Ballrooms 2 & 3)
    REFRESHMENT BREAK:           10:10am - 10:20am (Lotus Ballrooms 2 & 3)
    REFRESHMENT BREAK + POSTERS: 03:20pm - 03:40pm (Lotus Ballrooms 2 & 3)
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December 15, 2022 (Thursday):
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    CONTINENTAL BREAKFAST:       07:00am - 08:00am (Lotus Ballrooms 2 & 3)
    REFRESHMENT BREAK:           10:00am - 10:20am (Lotus Ballrooms 2 & 3)
    REFRESHMENT BREAK + POSTERS: 03:20pm - 03:40pm (Lotus Ballrooms 2 & 3)
    RECEPTION DINNER:            07:00pm - 09:00pm (Ballrooms Galleria B-C
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December 15, 2022 (Thursday):
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    CONTINENTAL BREAKFAST:       07:00am - 08:00am (Lotus Ballrooms 2 & 3)
    REFRESHMENT BREAK:           10:00am - 10:20am (Lotus Ballrooms 2 & 3)
    REFRESHMENT BREAK + POSTERS: 03:20pm - 03:40pm (Lotus Ballrooms 2 & 3)
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PRESENTATIONS OF GENERAL INTEREST (OPENING REMARKS, KEYNOTES, ...):
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OPENING REMARKS:
CSCI 2022 Steering Committee representative,
Professor Emeritus Hamid R. Arabnia
School of Computing, University of Georgia, USA;
Editor-in-Chief, The Journal of Supercomputing (Springer);
Editor, Transactions of Computational Science & Computational
Intelligence (Springer)
Date & Time: December 14, 2022, Wednesday - 08:00am -8:20am
(LOCATION: Ballrooms Galleria D-E)

KEYNOTE:
Explainability and Accountability in Deep Few-Shot Learning:
A Case Study in Medical Imaging Informatics
Dr. Ahmad P. Tafti
Faculty, Health Informatics, University of Pittsburgh, USA and
Director, Pitt Health + Explainable AI (Pitt HexAI)
Vice Chair, IEEE Computer Society at Pittsburgh
Date & Time: December 14, 2022, Wednesday - 08:20am - 09:00am
(LOCATION: Ballrooms Galleria D-E)

OPPORTUNITIES WITH De Gruyter:
Steve Elliot (Senior Publishing Editor) & Daniel Tiemann (Vice President);
De Gruyter
Date & Time: December 14, 2022, Wednesday - 09:00am - ...
(LOCATION: Ballrooms Galleria D-E)

KEYNOTE:
Measuring, Optimizing and Improving Collective Intelligence &
Group Performance Using Artificial Intelligence
Massoud Alibakhsh
Founder & CEO, Xeba Technologies, Atlanta Georgia, USA
www.xeba.tech
Date & Time: December 15, 2022, Thursday - 09:20am - 10:00am
(LOCATION: Ballrooms Galleria D-E)

KEYNOTE:
High-Level Development of Distributed Real-Time Applications
Using Mobile Cloud and Software-Defined Networking
Prof. Sergei Gorlatch
Professor & Chair of Parallel and Distributed Computing,
University of Muenster, Germany
Date & Time: December 15, 2022, Thursday - 11:40am - 12:20pm
(LOCATION: Ballrooms Galleria D-E)

DECEMBER 13, 2022

03:00p - 06:00p: REGISTRATION
                  (LOCATION: Lotus Ballrooms 2 & 3)

DECEMBER 14, 2022
THERE ARE THREE SETS OF CONCURRENT SESSIONS ON December 14, 2022; TWO
are ON-SITE PRESENTATIONS (FACE-TO-FACE) IN BALLROOMS GALLERIA B-C AND
GALLERIA D-E AND THE THIRD IS ONLINE (THE ZOOM LINKS are ALREADY PROVIDED
TO SPEAKERS AND ALL REGISTERED AUTHORS).

7:00am - 5:00pm: REGISTRATION
                  (LOCATION: Lotus Ballrooms 2 & 3)

07:00 - 08-00am: CONTINENTAL BREAKFAST
                  (LOCATION: Lotus Ballrooms 2 & 3)

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                ON-SITE PRESENTATIONS & ACTIVITIES (DECEMBER 14, Wednesday)
                LOCATION: Ballrooms Galleria D-E
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08:00 - 08:20am: **OPENING REMARKS - December 14, 2022, Wednesday;**
CSCI 2022 Steering Committee representative,
Professor Emeritus Hamid R. Arabnia
School of Computing, University of Georgia, USA;
Editor-in-Chief, The Journal of Supercomputing (Springer);
Editor, Transactions of Computational Science & Computational
Intelligence (Springer)
(LOCATION: Ballrooms Galleria D-E)

08:20 - 09:00am: **KEYNOTE:**
Explainability and Accountability in Deep Few-Shot Learning:
A Case Study in Medical Imaging Informatics
Dr. Ahmad P. Tafti
Faculty, Health Informatics, University of Pittsburgh, USA and
Director, Pitt Health + Explainable AI (Pitt HexAI)
Vice Chair, IEEE Computer Society at Pittsburgh
(LOCATION: Ballrooms Galleria D-E)

09:00 - 09:10am: **Steve Elliot (Senior Publishing Editor) &**
Daniel Tiemann (Vice President);
De Gruyter
(LOCATION: Ballrooms Galleria D-E)

SESSION 1A-WED: **(CONCURRENT SESSION WITH ON-SITE SESSION 7B-WED & ON-LINE SESSIONS)**
SIGNAL & IMAGE PROCESSING, COMPUTER VISION & PATTERN RECOGNITION
(CSCI-RTPC)
Chairs: Dr. Moh'd A. Radaideh
Jordan University of Science and Technology, Irbid, Jordan
December 14, 2022 (Wednesday); 09:10am - 10:30am
(LOCATION: Ballrooms Galleria D-E)

09:10 - 09:30am: Smartphone-Based Turbidity Estimation with Inherent Calibration
Ding Zhang, Alan Marchiori, Joshua Stough
Department of Computer Science, Bucknell University, Lewisburg,
Pennsylvania, USA

09:30 - 09:50am: Fixed-point Iterative Computation of Gaussian Barycenters for
Some Dissimilarity Measures
Alessandro D'Ortenzio, Costanzo Manes, Umut Orguner
Department of Information Engineering, Computer Science and
Mathematics, University of L'Aquila, Italy;
Department of Electrical and Electronics Engineering,
Middle East Technical University, Turkey

09:50 - 10:10am: Fast One-Stage Human Pose Estimation by Polar Coordinate
Representation
Jiahua Wu, Hyo Jong Lee
Division of Computer Science and Engineering, Jeonbuk National
University, Jeonju-si, Republic of Korea

10:10 – 10:30am: Fast Key Points Detection and Matching for Tree-Structured Images
Hao Wang*, Xiwen Chen, Abolfazl Razi, Rahul Amin
School of Computing, Clemson University, South Carolina, USA;
MIT Lincoln Laboratory, Massachusetts Institute of Technology, Massachusetts, USA

SESSION 2A-WED: (CONCURRENT SESSION WITH ON-SITE SESSION 8B-WED & ON-LINE SESSIONS)
BIG DATA AND DATA SCIENCE (CSCI-RTBD) & COMPUTATIONAL SCIENCE (CSCI-RTCS) +
Health Informatics (CSCI-RTHI)
Chairs: Dr. Jyoti Prakash Singh* & Dr. Varalakshmi M**
      * National Institute of Technology Patna, India;
      ** Vellore Institute of Technology, Vellore, India
December 14, 2022 (Wednesday); 10:30am - 12:30pm
(LOCATION: Ballrooms Galleria D-E)

10:30 - 10:50am: Word2vec Embeddings for Categorical Values in Synthetic
Tabular Generation
Waldemar Hahn, Martin Sedlmayr, Markus Wolfien
Institute for Medical Informatics & Biometry, Faculty of Medicine
Carl Gustav Carus, Technische Universit, Dresden, Germany

10:50 - 11:10am: New Version of Fast Automatic Determination of Cluster Numbers
for High Dimensional Big Data
Zohreh Safari
Department of Computer Science, Elizabeth City State University,
Elizabeth City, North Carolina, USA

11:10 - 11:30am: Generating Random XML Files Using DGL
Peter M. Maurer, John Carbone
Department of CS, Baylor University, Waco, Texas, USA

11:30 - 11:50am: eVision: Forecasting the Spread of Tuberculosis in India with Deep Learning
Juan Zuluaga, Michael Castillo, Divya Syal, Andres Calle, Navid Shaghaghi
Ethical, Pragmatic, & Intelligent Computing (EPIC) Laboratory, in
collaboration with the Healthcare Innovation & Design (HID) Program,
Departments of Computer Science & Engineering (CSEN), Information
Systems & Analytics (ISA), Mathematics & Computer Science (MCS), and
Bioengineering, Santa Clara University, Santa Clara, California, USA

11:50 - 12:10pm: N-Body Performance with a kD-Tree: Comparing Rust to Other Languages
Jonathan Rotter, Mark C. Lewis
Department of Computer Science, Trinity University,
San Antonio, Texas, USA

12:10 - 12:30pm: Multi-user Searchable Attribute Based Encryption for
Outsourced Big Data
Kyle Astudillo, Mahdi Ebrahimi, Adam Kaplan
Computer Science Department, California State University, Northridge, California, USA

12:30 - 01:00pm: LUNCH (On Your Own)

SESSION 3A-WED: (CONCURRENT SESSION WITH ON-SITE SESSION 9B-WED & ON-LINE SESSIONS)
ARTIFICIAL INTELLIGENCE & APPLICATIONS (CSCI-RTAI)
Chairs: Prof. Satpreet Singh
      Ardass Corporation, USA & McGeorge School of Law, University of Pacific &
      Northcentral University, San Diego, CA, USA
December 14, 2022 (Wednesday); 01:00pm - 02:20pm:
(LOCATION: Ballrooms Galleria D-E)

01:00 - 01:20pm: Qualitative Review of Art Generating AI Applications and
their Relationship to NFTs
Emine Arikan, Siamak Aram
Harrisburg University of Science and Technology, USA

01:20 - 01:40pm: EXPANSE: A Continual and Progressive Learning System for Deep
                   Transfer Learning
                   Mohammadreza Iman, John A. Miller, Khaled Rasheed,
                   Robert M. Branch, Hamid R. Arabnia
                   School of Computing, University of Georgia, USA;
                   Institute for Artificial Intelligence, University of Georgia, USA;
                   Learning, Design, and Technology, College of Education,
                   University of Georgia, USA

01:40 - 02:00pm: A Tensor Decomposition in Multi-way Electroencephalogram (EEG)
                   Data Analysis
                   Essence J. Stevenson, Roger B. Sidje
                   Paul W. Bryant High School, Tuscaloosa, Alabama, USA;
                   Department of Mathematics, The University of Alabama,
                   Tuscaloosa, Alabama, USA

02:00 - 02:20pm: Which Deep Learning Framework Should I Use: A Comparative
                   Study for Deep Regression Modeling
                   Vishu Gupta, Wei-Keng Liao, Alok Choudhary, Ankit Agrawal
                   ECE Department, Northwestern University, Evanston,Illinois, USA

**SESSION 4A-WED: (CONCURRENT SESSION WITH ON-SITE SESSION 10B-WED & ON-LINE SESSIONS)
                   PARALLEL & DISTRIBUTED COMPUTING & HPC (CSCI-RTPD) +
                   CLOUD COMPUTING (CSCI-RTCC) + MOBILE COMPUTING & Security (CSCI-RTMC)
                   Chairs: Dr. Vijayarangan Natarajan
                           Tata Consultancy Services Limited, India
                   December 14, 2022 (Wednesday); 02:20pm - 03:20pm
                   (LOCATION: Ballrooms Galleria D-E)**

02:20 - 02:40pm: A Concurrent Relaxed Queue for Handling Unordered Parallel
                   Accesses on GPUs
                   Mengshen Zhao, David Troendle, Byunghyun Jang
                   Computer and Information Science, University of Mississippi,
                   Univeristy, Mississippi, USA

02:40 - 03:00pm: Approach of Migrating SAAS Applications to Password-less
                   Authentication
                   Iehab Al Rassan, Hala Alajlan
                   Computer Science Department, King Saud University,
                   Riyadh, Saudi Arabia

03:00 - 03:20pm: Android Malware Detection Using Machine Learning Techniques
                   Priya Raghuvanshi, Jyoti Prakash Singh
                   Department of Computer Science and Engineering,
                   National Institute of Technology Patna, Patna, India

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03:20 - 03:40pm:   BREAK (Refreshments) & POSTERS
                   (LOCATION: Lotus Ballrooms 2 & 3)

                   O.  A Study of Model Based and Model Free Offline Reinforcement
                       Learning
                       Indu Shukla, Haley Dozier, Althea C. Henslee
                       Information Technology Laboratory, Engineer Research and
                       Development Center (ERDC), U.S. Army Engineer Research and
                       Development Center, Vicksburg, Mississippi, USA
                   O.  Machine Learning Opportunities for Improving Logistics within
                       the Army
                       Joseph E. Jabour, Arnold L. Thomas, Indu Shukla, Brandon E. Hansen,
                       Haley R. Dozier, Ian D. Detwiller, Althea C. Henslee
                       US Army Engineer Research and Development Center,
                       Vicksburg, Mississippi, USA
                   O.  Designing of Prompts for Hate Speech Recognition with
                       In-Context Learning
                       Lawrence Han, Hao Tang
                       Ridge High School, Basking Ridge, New Jersey, USA;
                       Computer Information Systems, The City University of New York,
                       New York City, New York, USA
                   O.  Intelligent Processing of Judicial Documents Based on
                       Deep Learning
                       Jingzi Wang, Chao-Lin Liu
                       Department of Computer Science, National Chengchi University,
                       Taipei, Taiwan
                   O.  Proposal of a Multi-purpose Marketing Data Analysis Program
                       Design Methodology
                       Donggyu Choi, Jongwook Jang
                       Institute of Smart IT, Dong-eui University, Busan,
                       Republic of Korea;  Department of Computer Engineering,
                       Dong-eui University, Busan, Republic of Korea
                   O.  CSecPrivAF - Cybersecurity and Privacy Assessment Framework
                       for IoT Systems
                       Sergio Luis Ribeiro, Joao Pedro de Lima Cassiano, Alana Almeida
                       Security and Privacy, CPQD - Centro de Pesquisa e
                       Desenvolvimento em Telecomunicacoes, Campinas/SP, Brazil
                   O.  Unknown Malicious Domain Detection Based on DNS Query
                       Analysis using Word2Vec
                       Hiroto Yamada, Daiki Nobayashi, Akihiro Satoh, Yutaka Nakamura,
                       Takeshi Ikenaga
                       Kyushu Institute of Technology, Fukuoka, Japan
                   O.  Collision Avoidance Method for Broadcast Communication over
                       Multi-hop HD-PLC Network
                       Yuki Furuhama, Daiki Nobayashi, Kazuya Tsukamoto, Takeshi Ikenaga
                       Kyushu Institute of Technology, Fukuoka, Japan


SESSION 5A-WED:    (CONCURRENT SESSION WITH ON-SITE SESSION 11B-WED & ON-LINE SESSIONS)
                   SOCIAL NETWORK ANALYSIS, SOCIAL MEDIA, & MINING (CSCI-RTNA)
                   Chairs: Dr. Moh'd A. Radaideh*, Prof. Maheshwari Prasad Singh**
                           *Jordan University of Science and Technology, Irbid, Jordan
                           **National Institute of Technology Patna, India
                   December 14, 2022 (Wednesday); 03:40pm - 05:20pm
                   (LOCATION: Ballrooms Galleria D-E)

03:40 - 04:00pm:   Sentiment Analysis and Topic Modeling on COVID-19 Vaccines
                   using Twitter Data
                   Daniel Ojeda, Eric Landaverde, Daehan Kwak
                   Department of Computer Science and Technology, Kean University,
                   Union, New Jersey, USA
```

04:00 - 04:20pm: Analyzing Climate Change Discussions on Reddit
                   Mohammad S. Parsa, Haoqi Shi, Yihao Xu, Aaron Yim, Yaolun Yin,
                   Lukasz Golab
                   University of Waterloo, Waterloo, Canada

04:20 - 04:40pm: An Experiment on Dynamic Extraction of the Human-Relationships
                   on the Web Using Closeness Centrality
                   Ayaka Ichikawa, Ryo Onuma, Hiroki Nakayama, Hiroaki Kaminaga,
                   Youzou Miyadera, Shoichi Nakamura
                   Fukushima University, Japan; Tsuda University, Japan;
                   Yamagata University, Japan; Tokyo Gakugei University, Japan

04:40 - 05:00pm: An Analysis of Public Sentiment around Face Mask During COVID-19
                   Eric Landaverde, Daniel Ojeda, Daehan Kwak
                   Department of Computer Science and Technology,
                   Kean University, Union, New Jersey, USA

05:00 - 05:20pm: A Smart Trust Based Approach for Sybil Node Detection in
                   Online Social Networks
                   Ranjan Kumar, Yashwanth Dasari, Prabhat Kumar, Akash Sinha
                   Department of Computer Science and Engineering,
                   National Institute of Technology Patna, India

SESSION 6A-WED: **(CONCURRENT SESSION WITH ON-SITE SESSION 12B-WED & ON-LINE SESSIONS)**
                   SOFTWARE ENGINEERING (CSCI-RTSE)
                   Chairs: Dr. Navid Shaghaghi*, Prof. Prabhat Kumar**
                   **   *Ethical, Pragmatic, and Intelligent Computing (EPIC) Lab Director,**
                   **   College of Arts & Sciences & School of Engineering,**
                   **   Santa Clara University, California, USA**
                   **   **National Institute of Technology Patna, India**
                   December 14, 2022 (Wednesday); 05:20 - 06:40pm
                   (LOCATION: Ballrooms Galleria D-E)

05:20 - 05:40pm: GATE II: Visualizing Semantic Web Search
                   Nisha Kottekat, Kevin Gary
                   School of Computing and Augmented Intelligence,
                   Arizona State University, Tempe, Arizona, USA

05:40 - 06:00pm: On the Educational and Professional Implications of Integrating
                   Mind Mapping in Software Testing
                   Pankaj Kamthan, Nazlie Shahmir
                   Department of Computer Science and Software Engineering,
                   Concordia University, Montreal, Canada;
                   IS Quality Engineering, Canadian Pacific Railway Limited,
                   Calgary, Canada

06:00 - 06:20pm: Hospitality Industry 4.0 - Customize and Optimize Real-Time
                   Allocation of Rooms
                   Vijayarangan Natarajan, Rashmi Kumari, Sakthi Priya M
                   Travel & Hospitality-Strategic Initiative group, TCS Ltd, India

06:20 - 06:40pm: Measuring Influencing Factors of API Usability
                   Jeff Tian, Sultan Alanazy, Abdullah Bokhary, Sultan Alharthi,
                   Sakher Ghanem
                   Department of Computer Science, Southern Methodist University,
                   Dallas, Texas, USA; College of CS & IT, Imam Abdulrahman
                   Bin Faisal University, Dammam, Saudi Arabia; Department of
                   Software Engineering, College of CSE, University of Jeddah,
                   Jeddah, Saudi Arabia; Department of CS & AI, College of
                   CSE, University of Jeddah, Jeddah, Saudi Arabia

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ON-SITE PRESENTATIONS & ACTIVITIES (DECEMBER 14, Wednesday)
LOCATION: Ballrooms Galleria B-C
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SESSION 7B-WED: (CONCURRENT SESSION WITH ON-SITE SESSION 1A-WED & ON-LINE SESSIONS)
ARTIFICIAL INTELLIGENCE & APPLICATIONS (CSCI-RTAI) + SECURITY (CSCI-RTCW)
Chairs: Drs. Rich Dill & Preston Albury
        Air Force Institute of Technology, Wright-Patterson AFB, Ohio, USA
December 14, 2022 (Wednesday); 09:10am - 10:30am
(LOCATION: Ballrooms Galleria B-C)

09:10 - 09:30am: Performance Analysis of a Micromodel-based Multinomial Classifier
Jawahar Y.V., Sanjay Nithin S, Varalakshmi M , Peer Mohideen
Vellore Institute of Technology (VIT), India

09:30 - 09:50am: Various Patient Classification Model using ABR Data
Jun Ma, Seong Jun Choi, Jaehyon Kim, Min Hong
Department of Software Convergence, Soonchunhyang University,
Asan, Republic of Korea; Department of Otorhinolaryngology,
Head and Neck Surgery, College of Medicine, Soonchunhyang
University Cheonan Hospital, Cheonan, Republic of Korea;
Department Computer Education, Sungkyunkwan University, Seoul, Republic of Korea

09:50 - 10:10am: Few-shot Learning on Histopathology Image Classification
Ankit Kumar Titoriya, Maheshwari Prasad Singh
Department of Computer Science & Engineering,
National Institute of Technology Patna, Patna, India

10:10 – 10:30am: Contemporary Cybersecurity Challenges in Metaverse using
Artificial Intelligence
Fadi Al-Ayed
Department of Electrical Engineering and Computer Science,
The Catholic University of America, Washington D.C., USA

SESSION 8B-WED: (CONCURRENT SESSION WITH ON-SITE SESSION 2A-WED & ON-LINE SESSIONS)
RESEARCH TRACK ON EDUCATION + STEM (CSCI-RTED)
Chairs: Dr. Pankaj Kamthan* & Dr. Antonio Sanchez Aguilar**
        *Concordia University, Canada;
        ** Texas Christian University, Texas, USA
December 14, 2022 (Wednesday); 10:30am - 12:30pm
(LOCATION: Ballrooms Galleria B-C)

10:30 - 10:50am: Knowledge: Making a Quality Choice
Antonio Sanchez
Department of Computer Science, Texas Christian University,
Texas, USA

10:50 - 11:10am: Exploring the Impact of Student Learning and Programming
Pedagogy while Adjusting to COVID-19 (An HBCU Case Study)
Edward Dillon, Krystal L. Williams, Steven Fuller, Elisee Djapa,
Abigail Dina, Makhya Wilridge, Chauncey Rogers
Department of Computer Science, Morgan State University,
Baltimore, Maryland, USA;
Louise McBee Institute of Higher Education,
University of Georgia, Athens, Georgia, USA

11:10 - 11:30am: Analysis of Student Learning Outcomes in Data Structures
and Algorithms
Dewan Tanvir Ahmed
Department of Computer Science, University of North Carolina
at Charlotte, Charlotte, North Carolina, USA
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11:30 – 11:50am:   A Framework for Promoting Students Experience the Examination
                   of Articles that Alert Dangers of Disaster on Social Media
                   Tomoki Ishii, Ryo Onuma, Hiroki Nakayama, Hiroaki Kaminaga,
                   Youzou Miyadera, Syoichi Nakamura
                   Fukushima University, Japan;  Tsuda University, Japan;
                   Yamagata University, Japan;  Tokyo Gakugei University, Japan


11:50 – 12:10pm:   Implementation of Microsoft's PowerBI into Education
                   David Zenisek, Michal Simon
                   Department of Industrial Engineering,
                   University of West Bohemia, Pilsen, Czech Republic


12:10 - 12:30pm:   Information Technology Education: A Multi-Fold
                   Learning Approach
                   Moh'd A. Radaideh
                   Department of Software Engineering, Faculty of Computer and
                   Information Technology, Jordan University of Science and
                   Technology, Irbid, Jordan


**12:30 - 01:00pm:   LUNCH (On Your Own)**


**SESSION 9B-WED:    (CONCURRENT SESSION WITH ON-SITE SESSION 3A-WED & ON-LINE SESSIONS)**
                   **CYBER WARFARE, CYBER DEFENSE, & CYBER SECURITY (CSCI-RTCW)**
                   **Chairs: Dr. Munir Majdalawieh\* & Dr. Li Li\*\***
                           **\* Zayed University, United Arab Emirates (UAE);**
                           **\*\* Defence Research and Development Canada (DRDC), Canada**
                   **December 14, 2022 (Wednesday); 01:00pm - 02:20pm**
                   **(LOCATION: Ballrooms Galleria B-C)**


01:00 - 01:20pm:   Linguistic Casualties: Cybersecurity Degrees must Require
                   Foreign Languages
                   Gary L. Wallace
                   Southern Utah University, Cedar City, Utah, USA;
                   Commander and Director of Information Technology and Security,
                   United States Navy Space and Naval Warfare Systems
                   Command (retired), USA


01:20 - 01:40pm:   How Can We Make Law Firms Less Vulnerable to Cyber-Attacks?
                   Liam Cosgrave, Lila Rajabion
                   School of Graduate Studies, SUNY Empire State College,
                   New York, USA


01:40 - 02:00pm:   An Intelligent Approach for Intrusion Detection using Snake
                   Optimizer and Random
                   Salahaldeen Duraibi
                   Department of Computer and Network Engineering,
                   Jazan University, Jazan, Saudi Arabia


02:00 - 02:20pm:   Assessing the Attacks Against the Online Authentication
                   Methods Using a Comparison Matrix: A Case of Online Banking
                   Munir Majdalawieh, Anoud Bani-Hani, Mohammed Hussain,
                   Aisha Alshamsi
                   Information Systems and Technology Management,
                   Zayed University, Dubai, UAE;  Applied Information Technology,
                   Zayed University Dubai, UAE;  Quality Asurance Office,
                   Zayed University Dubai, UAE

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SESSION 10B-WED:   (CONCURRENT SESSION WITH ON-SITE SESSION 4A-WED & ON-LINE SESSIONS)
                   ARTIFICIAL INTELLIGENCE (CSCI-RTAI)
                   Chairs: Dr. M. Abdullah-Al-Wadud
                           King Saud University, Riyadh, Saudi Arabia
                   December 14, 2022 (Wednesday); 02:20pm - 03:20pm
                   (LOCATION: Ballrooms Galleria B-C)
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02:20 - 02:40pm: Machine Learning Methods for Evaluating Public Crisis:
                   Meta-Analysis
                   Izunna Okpala, Shane Halse, Jess Kropczynski
                   University of Cincinnati, Cincinnati, USA

02:40 - 03:00pm: Minimizing Computational Overhead While Retaining Gameplay
                   Effectiveness in Starcraft Bots
                   David Kipnis, Wesley Deneke, Matthew Mitchell, Nils Rys-Recker
                   Computer Science Department, Western Washington University,
                   Bellingham, Washington, USA

03:00 - 03:20pm: Remaining Trip Time Prediction Using Light Gradient Boosting
                   Machine in Nuclear Power Plants
                   Sang Won Oh, Sang Hyun Lee, Man Gyun Na
                   Department of Nuclear Engineering, Chosun University,
                   Dong-gu, Gwangju, Republic of Korea

03:20 - 03:40pm: BREAK (Refreshments) & POSTERS
                   (LOCATION: Lotus Ballrooms 2 & 3)

        O. A Study of Model Based and Model Free Offline Reinforcement
            Learning
            Indu Shukla, Haley Dozier, Althea C. Henslee
            Information Technology Laboratory, Engineer Research and
            Development Center (ERDC), U.S. Army Engineer Research and
            Development Center, Vicksburg, Mississippi, USA
        O. Machine Learning Opportunities for Improving Logistics within
            the Army
            Joseph E. Jabour, Arnold L. Thomas, Indu Shukla, Brandon E. Hansen,
            Haley R. Dozier, Ian D. Detwiller, Althea C. Henslee
            US Army Engineer Research and Development Center,
            Vicksburg, Mississippi, USA
        O. Designing of Prompts for Hate Speech Recognition with
            In-Context Learning
            Lawrence Han, Hao Tang
            Ridge High School, Basking Ridge, New Jersey, USA;
            Computer Information Systems, The City University of New York,
            New York City, New York, USA
        O. Intelligent Processing of Judicial Documents Based on
            Deep Learning
            Jingzi Wang, Chao-Lin Liu
            Department of Computer Science, National Chengchi University,
            Taipei, Taiwan
        O. Proposal of a Multi-purpose Marketing Data Analysis Program
            Design Methodology
            Donggyu Choi, Jongwook Jang
            Institute of Smart IT, Dong-eui University, Busan,
            Republic of Korea; Department of Computer Engineering,
            Dong-eui University, Busan, Republic of Korea
        O. CSecPrivAF - Cybersecurity and Privacy Assessment Framework
            for IoT Systems
            Sergio Luis Ribeiro, Joao Pedro de Lima Cassiano, Alana Almeida
            Security and Privacy, CPQD - Centro de Pesquisa e
            Desenvolvimento em Telecomunicacoes, Campinas/SP, Brazil

O. Unknown Malicious Domain Detection Based on DNS Query
    Analysis using Word2Vec
    Hiroto Yamada, Daiki Nobayashi, Akihiro Satoh, Yutaka Nakamura,
    Takeshi Ikenaga
    Kyushu Institute of Technology, Fukuoka, Japan
O. Collision Avoidance Method for Broadcast Communication over
    Multi-hop HD-PLC Network
    Yuki Furuhama, Daiki Nobayashi, Kazuya Tsukamoto, Takeshi Ikenaga
    Kyushu Institute of Technology, Fukuoka, Japan

SESSION 11B-WED: **(CONCURRENT SESSION WITH ON-SITE SESSION 5A-WED & ON-LINE SESSIONS)**
COMPUTATIONAL INTELLIGENCE (CSCI-RTCI) +
COMPUTATIONAL SCIENCE (CSCI-RTCS)
Chairs: Dr. Jun Zhang
**   University of Maryland, Eastern Shore, Maryland, USA**
December 14, 2022 (Wednesday); 03:40pm - 05:20pm
(LOCATION: Ballrooms Galleria B-C)

03:40 - 04:00pm: Is There a Limit to the Utility of Analogy? A Case Study in
Knowledge Graph Triple Representation
Alexander Kalinowski, Yuan An
Department of Information Science, Drexel University,
Philadelphia, USA

04:00 - 04:20pm: Contextual Fusion of Classifiers under Variable Atmospheric
Conditions for Coastal Surveillance
Oceane Tran, Anne-Laure Jousselme, Gilles Tedeschi, Lionel Gardenal
CS Group, La Garde, France;
University of Toulon, France

04:20 - 04:40pm: New Algorithms for the Computation of Inverse Transforms
Jun Zhang, Ruzong Fan, Fangyang Shen
Department of Computer Science and Engineering Technology,
University of Maryland Eastern Shore, Maryland, USA;
Department of Biostatistics, Bioinformatics, and Biomathematics,
Georgetown University, Washington, DC, USA;
Department of Computer Systems Technology, New York City College of
Technology, City University of New York, Brooklyn, New York, USA

04:40 - 05:00pm: Hibernation Based Hybrid Booting for Baseboard Management
Controller
Ajung Kim, Jaehoon Ahn, Younghwan Kim, Jiman Hong
School of Computer Science and Engineering,
Soongsil University, Seoul, South Korea;
Intelligent IDC Project Office, Korea Electronics Technology
Institute, Seongnam, South Korea

05:00 - 05:20pm: An Open and Fully Decentralised Platform for Safe Food
Traceability
Eric Tutu Tchao, Elton Gyabeng, Andrews Tang,
Joseph Barnes Nana Benyin, Eliel Keelson, Jerry John Kponyo
Distributed IoT Platforms, Privacy and Edge-Intelligence
Research Lab, Kwame Nkrumah University of Science
and Technology, Ghana

SESSION 12B-WED: **(CONCURRENT SESSION WITH ON-SITE SESSION 6A-WED & ON-LINE SESSIONS)**
BIG DATA AND DATA SCIENCE (CSCI-RTBD) + COMPUTATIONAL SCIENCE (CSCI-RTCS) +
CYBER WARFARE, CYBER DEFENSE, & CYBER SECURITY (CSCI-RTCW)
Chairs: Dr. Joshua Stough
Bucknell University, Lewisburg, Pennsylvania, USA
December 14, 2022 (Wednesday); 05:20pm – 07:00pm
(LOCATION: Ballrooms Galleria B-C)

05:20 - 05:40pm: An Improved Sudoku Solver
Adiba Afif Suha Binta Wadud, M. Abdullah-Al-Wadud
Bangladesh International School, English Section, Riyadh, Saudi Arabia;
Department of Software Engineering, College of Computer and Information
Sciences, King Saud University, Riyadh, Saudi Arabia

05:40 - 06:00pm: Structuring Context Entities for Knowledge Discovery
Nour Matta, Nada Matta, Agata Marcante, Nicolas Declercq
LIST3N, University of Technology of Troyes, France;
Namkin, Troyes, France

06:00 - 06:20pm: Arithmetic Optimization Algorithm based Feature Selection
Approach for malicious URL Detection
Nawaf Abdualaziz Almolhis
Computer Science Depertment, College of Computer Science &
Information Technology, Jazan University, Jazan, Saudi Arabia

06:20 - 06:40pm: Privacy-Preserving Collaborative Intrusion Detection Systems:
A Federated Learning Framework
Chukwuebuka Ezelu, Ulrich Buehler
Department of Applied Computer Science, Fulda University of
Applied Sciences, Germany

06:40 – 07:00pm: FREE SLOT

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ONLINE PRESENTATIONS (DECEMBER 14 - Wednesday)
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PLEASE NOTE THAT ALL TIMES MENTIONED IN THIS DOCUMENT ARE IN TERMS OF
LAS VEGAS TIME-ZONE (USA Pacific Time-zone).

The online presentations are scheduled from 08:00am till 09:00pm daily - this
is to serve online speakers, online attendees, and participants who are residing
in different time zones. The conference has also granted the request from the
administrations of 9 institutions to live stream the online sessions for their
classrooms (one connection per classroom / institution).

IMPORTANT: If at all possible, speakers are expected to connect at the begining
           of the session in which their papers are scheduled for presentation.
           This will help the admin of the session to manage the logistical
           process. In case of questions about the online/ZOOM presentations
           during the conference days (Dec. 14-16, 2022), please contact
           csci.zoom@gmail.com

SESSION 1-ONLINE: COMPUTATIONAL INTELLIGENCE (CSCI-RTCI) AND COMPUTATIONAL
                  SCIENCE (CSCI-RTCS) + ARTIFICIAL INTELLIGENCE (CSCI-RTAI)
                  Chairs: TBA
                  December 14, 2022 (Wednesday); 08:00am - 11:00am
                  (ONLINE - ZOOM)

08:00 - 08:20am: Automatic Detection of Pathological Myopia using Smartphone App
                  Sarvat Ali, Shital A. Raut
                  Department of Computer Science, Visvesvaraya National
                  Institute of Technology, Nagpur, Maharashtra, India

08:20 - 08:40am: Fault Detection and Mitigation for Revenue Loss Minimization
                  Sepiribo L. Braide
                  Department of Electrical Engineering, Rivers State University,
                  Port Harcourt, Nigeria

08:40 - 09:00am: Winter Wheat Crop Yield Prediction on Multiple Heterogeneous
                  Datasets using Machine Learning
                  Yogesh Bansal, David Lillis, Tahar Kechadi
                  School of Computer Science, University College Dublin,
                  Dublin, Ireland

09:00 - 09:20am: Knowledge Discovery of Bovine Tuberculosis in the Eurasian
                  Badger using Machine Learning Techniques
                  Kyle McBride, Aleksandar Novakovic, Adele H. Marshall,
                  Emily Courcier
                  School of Mathematics and Physics, Queen's University Belfast,
                  Belfast, United Kingdom (UK); Joint Research Centre in AI for
                  Health and Welness, Ontario Tech University, Oshawa, Canada;
                  Veterinary Epidemiology Unit, DAERA, Belfast, United Kingdom (UK)

09:20 - 09:40am: FREE SLOT

09:40 - 10:00am: A Novel Hybrid Multi-resolution Image Registration Algorithm
                  with Curvelet Transform and Artificial Neural Networks
                  Hyunjong Choi, Xiao-Hua Yu
                  Department of Electrical Engineering, California Polytechnic
                  State University, San Luis Obispo, California, USA
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10:00 - 10:20am: Connected Hyperbolic Complex Networks
                   Rolland Vida, Jozsef Biro
                   Department of Telecommunications and Media Informatics,
                   Faculty of Electrical Engineering and Informatics,
                   Budapest University of Technology & Economics, Budapest, Hungary

10:20 - 10:40am: Modeling of Electrical Distribution System Reliability with Local
                   and Interregional Bidirectional Centralized Electric Vehicle
                   Charging Stations
                   Janine C. G. Darato, Jordan R. Perlas, Taufik Taufik,
                   Ali Dehghan Banadaki, Majid Poshtan
                   Electrical Engineering Department, Cal Poly State University,
                   San Luis Obispo, California, USA

10:40 - 11:00am: Formulations and Algorithms to Find Maximal and Maximum
                   Independent Sets of Graphs
                   Maher Heal, Kia Dashtipour, Mandar Gogate
                   Baghdad University, Baghdad, Iraq;
                   School of Computing, Edinburgh Napier University,
                   Merchiston Capus, Edinburgh, United Kingdom (UK)

11:00 - 11:20am: Fault Identification in Wind Turbines: A Data-Centric Machine
                   Learning Approach
                   Danielle Pinna, Rodrigo Toso, Rafelli Coutinho,
                   Ana Isabel Pereira, Diego Brandao
                   PPCIC - CEFET/RJ, Rio de Janeiro, Brazil;
                   Research - Microsoft, Boston, Massachussets, USA;
                   CeDRI - IPB, Braganca, Portugal

SESSION 2-ONLINE: ARTIFICIAL INTELLIGENCE & APPLICATIONS (CSCI-RTAI)
                   Chairs: TBA
                   December 14, 2022 (Wednesday); 11:20am - 02:00pm
                   (ONLINE - ZOOM)

11:20 - 11:40am: Offline Reinforcement Learning using the Advanced Framework
                   for Simulation, Integration, and Modelling Software
                   Althea Henslee, Haley Dozier, Abderahim Salhi, Indu Shukla,
                   Jules White, Ian Dettwiller
                   Information Technology Laboratory, U.S. Army Engineer Research
                   and Development Center, Vicksburg, Mississippi, USA;
                   Computer Science and Computer Engineering,
                   Vanderbilt University, Nashville, Tennessee, USA

11:40 - 12:00pm: Performance Reliability of Reinforcement Learning Algorithms in
                   Obstacle Avoidance Game with Differing Reward Formulations
                   Brandon Hansen, Haley Dozier
                   Information Technology Laboratory, U.S. Army Engineer Research
                   and Development Center, Vicksburg, M.S., USA

12:00 - 12:20pm: Software-Based Mass Customization of Artificial Neural Networks
                   and its Benefits
                   Dominic Rosch-Grace, Jeremy Straub
                   Department of Computer Science, North Dakota State University,
                   Fargo, North Dakota, USA

12:20 - 12:40pm: Investigating Gender and Racial Bias in ELECTRA
                  Maryam Taeb, Yonathan Torres, Hongmei Chi, Shonda Bernadin
                  Department of Electrical & Computer Engineering, Florida A&M
                  University, Tallahassee, Florida, USA;
                  Department of Computer and Information Sciences, Florida A&M
                  University, Tallahassee, Florida, USA

12:40 - 01:00pm: Predicting the Impact of Wildfire using Machine Learning
                  Techniques to Assist Effective Deployment of Resources by the
                  Fire and Forest Department
                  Nikesh Kumar Pahuja, Maria H. Rivero
                  Information Systems Engineering and Management, Harrisburg
                  University of Science and Technology, Harrisburg, PA, USA

01:00 - 01:20pm: Predicting Time Series Values with LSTM: Different Scenarios
                  for Prediction
                  Alberto Arteta, Kristopher Allbright, Mehmet Sahinoglu,
                  Luis Fernando de MIngo
                  Computer Science, Troy University, Troy, Alabama, USA;
                  Computer Science, Troy University, Montgomery, Alabama, USA;
                  Computer Science, UP, Madrid, Spain

01:20 - 01:40pm: Autonomous Voice Recognition Wheelchair Control System
                  Mokhles M. Abdulghani, Wilbur L. Walters, Khalid H. Abed
                  Department of Electrical & Computer Engineering and Computer
                  Science, Jackson State University, Jackson, Mississippi, USA

01:40 - 02:00pm: A Drone Flight Control Using Brain Computer Interface and
                  Artificial Intelligence
                  Mokhles M. Abdulghani, Arthur A. Harden, Khalid H. Abed
                  Jackson State University, Jackson, Mississippi, USA

SESSION 3-ONLINE: CYBER WARFARE, CYBER DEFENSE, & CYBER SECURITY (CSCI-RTCW)
Chairs: TBA
December 14, 2022 (Wednesday); 02:00pm – 03:20pm
(ONLINE - ZOOM)

02:00 – 02:20pm: Classifying RDP Remote Attacks on User Interfaces to Industrial
                  Control Systems
                  Ryan R. Ramirez, Thuy D. Nguyen, Neil C. Rowe, Joseph T. Meier
                  Department of Computer Science, Naval Postgraduate School,
                  Monterey, California, USA

02:20 – 02:40pm: Development of an Autonomous Retesting Penetration Testing Paradigm
                  Jeremy Straub
                  Department of Computer Science, North Dakota State University,
                  Fargo, North Dakota, USA

02:40 – 03:00pm: Mapping Zero-Click Attack Behavior into MITRE ATT&CK Mobile:
                  A Systematic Process
                  Awad Mussa, Zachary Daher, Brendan Martin, Connor Morgan
                  School of Computing and Analytics, Northern Kentucky University,
                  Highland Heights, Kentucky, USA

03:00 – 03:20pm: Analyzing Attacks On Client-Side Honeypots from Representative
                  Malicious Web Sites
                  Brian A. Foley, Neil C. Rowe, Thuy D. Nguyen
                  Department of Computer Science, Naval Postgraduate School,
                  Monterey, California, USA

SESSION 4-ONLINE: COMPUTATIONAL BIOLOGY (CSCI-RTCB) + COMPUTATIONAL INTELLIGENCE (CSCI-RTCI) AND CLOUD COMPUTING + DATA CENTERS (CSCI-RTCC)
Chairs: TBA
December 14, 2022 (Wednesday); 03:20 - 06:00pm
(ONLINE - ZOOM)

03:20 – 03:40pm: Investigating Protein Structure Populations from Simulation
                   Data using Unsupervised Learning
                   Gideon K. Gogovi, Joshua Kiddy K. Asamoah, Gabriel Obed Fosu
                   Department of Mathematics and Statistics, University of
                   Houston-Downtown, Houston, Texas, USA;
                   Department of Mathematics, Kwame Nkrumah University of Science
                   and Technology, Kumasi, Ghana

03:40 – 04:00pm: A Flexible Variant of the Neighbor-Joining for Building
                   Phylogenetic Trees
                   A. Chastel Lima, Eloi Araujo, Marco A. Stefanes, L. C. S. Rozante
                   Federal University of Mato Grosso do Sul, Campo Grande, MS, Brazil;
                   Federal University of ABC, Santo Andre, SP, Brazil

04:00 – 04:20pm: Spoken Digits Classification based on Spiking Neural Networks
                   with Memristor-based STDP
                   Danila Vlasov, Yury Davydov, Alexey Serenko, Roman Rybka,
                   Alexander Sboev
                   Complex of NBICS Technologies, NRC "Kurchatov Institute", Moscow,
                   Russian Federation;
                   Department of Automation Technology, National Taipei University
                   of Technology, Taipei, Taiwan

04:20 – 04:40pm: Screening Results by Colorectal5 of 169 Microarrays
                   Shuichi Shinmura
                   Professor Emeritus of Seikei University, Japan

04:40 - 05:00pm: EEG Classifier Using Wavelet Scattering Transform-Based Features
                   and Deep Learning for Wheelchair Steering
                   Mokhles M. Abdulghani, Wilbur L. Walters, Khalid H. Abed
                   Department of Electrical & Computer Engineering and
                   Computer Science, Jackson State University (JSU), Jackson, MS, USA

05:00 – 05:20pm: Container-based VoIP Failover Design on Kubernetes Overlay Networks
                   Cai-Sian Jhuang, Quincy Wu
                   Department of Computer Science and Informance Engineering,
                   National Chi Nan University, Nantou, Taiwan

05:20 – 05:40pm: Response-Time Tail Mitigation in Cloud Systems
                   Asaad Althoubi, Hassan Peyravi
                   Department of Computer Science, Kent State University,
                   Kent, Ohio, USA

05:40 - 06:00pm: Serverless Cloud Functions - Opportunity in Chaos
                   Madhavi Jaival, Katya Mkrtchyan, Adam Kaplan
                   Department of Computer Science, California State
                   University (CSU) Northridge, California, USA

SESSION 5-ONLINE: CYBER SECURITY (CSCI-RTCW) + MOBILE COMPUTING (CSCI-RTMC) +
INTERNET OF THINGS (CSCI-RTOT) + SOFTWARE ENGINEERING (CSCI-RTSE) +
EDUCATION (CSCI-RTED)
Chairs: TBA
December 14, 2022 (Wednesday); 06:00pm – 08:20pm
(ONLINE - ZOOM)

06:00 – 06:20pm: When AI Facilitates Trust Violation: An Ethical Report on Deep
Model Inversion Privacy Attack
Mahdi Khosravy, Kazuki Nakamura, Antoine Pasquali, Olaf Witkowski,
Naoko Nitta, Noboru Babaguchi
Cross Labs, Cross Compass Ltd., Tokyo, Japan; Tokyo University of
Science, Tokyo, Japan; Mukogawa Women's University, Hyogo, Japan;
Institute for Datability Science, Osaka University, Osaka, Japan;
Department of Management and Information Sciences,
Fukui University of Technology, Fukui, Japan

06:20 – 06:40pm: Detection and Isolation Malware by Dynamic Routing Moving Target
Defense with Proxies
Kouki Inoue, Hiroshi Koide
Graduate School of Information Science and Electrical Engineering,
Kyushu University, Fukuoka, Japan; Research Institute of
Information Technology, Kyushu University, Fukuoka, Japan

06:40 - 07:00pm: Unknown Malicious Domain Detection Based on DNS Query Analysis
using Word2Vec
Hiroto Yamada, Daiki Nobayashi, Akihiro Satoh,
Yutaka Nakamura, Takeshi Ikenaga
Kyushu Institute of Technology, Fukuoka, Japan

07:00 – 07:20pm: Steganalysis on Covert Channel in IPv6 Flow Label
Da-Chih Lin, Quincy Wu
Department of Computer Science and Informance Engineering,
National Chi Nan University, Nantou, Taiwan

07:20 – 07:40pm: Study of Ultrasonic Data Collection System for Anomaly Detection
on Mechanical Equipment
Rio Shigyo, Daiki Nobayashi, Kazuya Tsukamoto,
Mitsunori Mizumachi, Takeshi Ikenaga
Kyushu Institute of Technology, Fukuoka, Japan

07:40 - 08:00pm: How We Develop an Online Kanban Board Game in Two Months?
Yu-Hsiang Hu, Chien-Tsun Chen, Yu Chin Cheng
Computer Science and Information Engineering, National Taipei
University of Technology, Taipei, Taiwan;
Teddysoft, Taipei, Taiwan

08:00 – 08:20pm: Redesigning an Upper-Division Java Elective into a Job Interview Preparation Class
Xuguang Chen
Computer Science Department, Saint Martin's University, Lacey, Washington, USA

DECEMBER 15, 2022
THERE ARE TWO SETS OF CONCURRENT SESSIONS ON December 15, 2022 (THURSDAY);
ONE SET OF SESSIONS (ON-SITE PRESENTATIONS) WILL BE HELD IN BALLROOMS
GALLERIA D-E AND THE OTHER SET OF SESSIONS WILL BE ONLINE (THE ZOOM LINK
IS ALREADY PROVIDED TO SPEAKERS AND ALL REGISTERED AUTHORS).

7:00am - 5:00pm: REGISTRATION
                  (LOCATION: Lotus Ballrooms 2 & 3)

07:00 - 08-00am: CONTINENTAL BREAKFAST
                  (LOCATION: Lotus Ballrooms 2 & 3)

                  ON-SITE PRESENTATIONS & ACTIVITIES (DECEMBER 15, Thursday)
                  LOCATION: Ballrooms Galleria D-E
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SESSION 13A-THU: (CONCURRENT SESSION WITH ON-LINE SESSIONS)
                  INTERNET OF THINGS (CSCI-RTOT) +
                  SMART CITIES AND SMART MOBILITY (CSCI-RTSC)
                  Chairs: Prof. Daniele Giusto*, Dr. Li Li**
                          * University of Cagliari, Italy
                          **Defence Research and Development Canada (DRDC), Canada
                  December 15, 2022 (Thursday); 08:00am - 09:20am
                  (LOCATION: Ballrooms Galleria D-E)

08:00 - 08:20am: Waste Management System
                  Mesk Saad Aldossari, Taghreed Assaf Almarshadi,
                  Reem Abduallah Alwasel, Rahaf Saeed Alqahtani,
                  Ala Saleh D. Alluhaidan
                  Information Systems Department, College of Computer & Information
                  Science, Princess Nourah Bint Abdulrahman University, Riyadh,
                  Saudi Arabia

08:20 - 08:40am: Delay-Based Dynamic Clustering Method for the IoT Cluster
                  Seo Jin Chang, Boyeon Kim, Yunseok Chang
                  Department of Computer Science, University of California,
                  Irvine, California, USA;
                  Department of R&D, Sekyung BMT Co., Seoul, Republic of Korea;
                  Department of Computer Engineering, Daejin University, Kyunggi,
                  Republic of Korea

08:40 - 09:00am: User Acceptance of a Modular Interactive Digital Twin of
                  the Production Department for Virtual Reality
                  Matej Dvorak, Jan Kubr, Miroslav Bednar, David Krakora,
                  Miroslav Malaga, Petr Horejsi, Michal Simon
                  Faculty of Mechanical Engineering,
                  University of West Bohemia, Pilsen, Czech Repubic

09:00 - 09:20am: Independent and Non-Invasive State Detection for Elevator
                  Based on Total Current Consumption
                  Pirmin Held, Daniel WeissHaar, Djaffar Ould Abdeslam,
                  Dirk Benyoucef
                  Furtwangen University, Furtwangen, Germany;
                  Universite de Haute-Alsace, Mulhouse, France

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09:20 - 10:00am:   KEYNOTE:
                   Measuring, Optimizing and Improving Collective Intelligence &
                   Group Performance Using Artificial Intelligence
                   Massoud Alibakhsh
                   Founder & CEO, Xeba Technologies, Atlanta Georgia, USA
                   www.xeba.tech
                   (LOCATION: Ballrooms Galleria D-E)



SESSION 14A-THU:   (CONCURRENT SESSION WITH ON-LINE SESSIONS)
                   COMPUTATIONAL SCIENCE (CSCI-RTCS) + COMPUTATIONAL BIOLOGY (CSCI-RTCB) +
                   DATA SCIENCE
                   Chairs: Dr. Yunfeng Shan
                           Guangxi Science & Technology Normal University, China and iREG, Canada
                   December 15, 2022 (Thursday); 10:00am - 11:40am
                   (LOCATION: Ballrooms Galleria D-E)


10:00 – 10:20am:   Exploring Attribute Selection and Classification Methods for Predicting
                   Heart Disease
                   Richard Jacob Stupka, Trinadh Chowdary Chigurupati, Devin Jackson, Demontae Moore
                   College of Computing & Software Engineering, Kennesaw State University, Georgia, USA

10:20 - 10:40am:   Fibonacci Numbers in Memory of Richard K. Guy
                   Weizheng Gao, Jianning Su, Olumide Malomo, Somasheker Akkaladevi,
                   Ephrem Eyob, Adeyemi A. Adekoya, Shanzhen Gao, Julian D. Allagan
                   Department of Mathematics and Computer Science, West Virginia
                   State University, West Virginia, USA;  Department of Mathematics
                   and Sciences, Midway University, Midway, Kentucky, USA;
                   Department of Computer Information Systems, Reginald F Lewis
                   College of Business, Virginia State University, Virginia, USA;
                   Department of Mathematics, Computer Science and Engineering
                   Technology, Elizabeth City State University, North Carolina, USA

10:40 - 11:00am:   Inteplato: Generating Mappings of Heterogeneous Relational
                   Schemas using Unsupervised Learning
                   Leonard Traeger, Andreas Behrend, George Karabatis
                   Information Systems, University of Maryland, Baltimore County,
                   Maryland, USA;
                   Communications Engineering, Technical University of Cologne,
                   Cologne, Germany

11:00 - 11:20am:   Three Genome-scale Approaches Support that Lungfish is the
                   Closest Living Relative of Land Vertebrate, But Not Coelacanth
                   Yunfeng Shan, Youjun Zhou, Guo Li, Xiu-Qing Li, Robin Gras
                   College of Mathematics and Computer Sciences, Guangxi Science
                   and Technology Normal University, P. R. China;  College of
                   Electronic Information and Automation, Guilin University of
                   Aerospace Technology, Guilin, P. R. China;  Fredericton Research
                   and Development Centre, Agriculture and Agri-Food Canada,
                   Fredericton, New Brunswick, Canada;  School of Computer Science,
                   University of Windsor, Windsor, Ontario, Canada;  Department of
                   Natural History, Royal Ontario Museum, Toronto, Ontario, Canada

11:20 - 11:40am:   Processing Time Comparison and Applications of Multiplying
                   2 by 2 Matrices using Strassen Algorithm
                   Shanzhen Gao, Olumide Malomo, Ephrem Eyob
                   Department of Computer Information Systems, Reginald F Lewis
                   College of Business, Virginia State University, Petersburg,
                   Virginia, USA;  Lifetime Fellow of the Institute for
                   Combinatorics and its Applications
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11:40 - 12:20pm:  KEYNOTE:
                  High-Level Development of Distributed Real-Time Applications
                  Using Mobile Cloud and Software-Defined Networking
                  Prof. Sergei Gorlatch
                  Professor & Chair of Parallel and Distributed Computing,
                  University of Muenster, Germany
                  (LOCATION: Ballrooms Galleria D-E)

12:20 - 01:00pm:  LUNCH (On Your Own)


SESSION 15A-THU:  (CONCURRENT SESSION WITH ON-LINE SESSIONS)
                  HEALTH INFORMATICS AND MEDICAL SYSTEMS (CSCI-RTHI)
                  Chairs: Dr. Jyoti Prakash Singh
                          National Institute of Technology Patna, India
                  December 15, 2022 (Thursday); 01:00pm - 02:20pm
                  (LOCATION: Ballrooms Galleria D-E)

01:00 - 01:20pm:  Summarizing Behavioral Health Electronic Health Records
                  using a Natural Language Processing Pipeline
                  Tristram Dacayan, Daniel Ojeda, Daehan Kwak
                  Department of Computer Science and Technology,
                  Kean University, Union, New Jersey, USA

01:20 - 01:40pm:  Question Formulation and Transformer Model Resilience
                  Ashraf Elnashar, William Schreiber, Jules White, Douglas C. Schmidt
                  Department of Computer Science, Vanderbilt University,
                  Nashville, Tennessee, USA

01:40 - 02:00pm:  Leveraging Data Pathways for Next Generation Safety Monitoring
                  of Medicines and Vaccines
                  Jeffery L. Painter, Laurie Girard, Michael Glaser, Andrew Bate
                  GlaxoSmithKline (GSK), Durham, North Carolina, USA;
                  GlaxoSmithKline (GSK), Upper Providence, PA, USA;
                  GlaxoSmithKline (GSK), London, United Kingdom (UK)

02:00 - 02:20pm:  Current Cybersecurity Challenges of Applying Blockchain in Healthcare
                  Nahla F AL Hamad, Jing-Chiou Liou
                  Department of Computer Science and Technology,
                  Kean University, Union, New Jersey, USA
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SESSION 16A-THU: (CONCURRENT SESSION WITH ON-LINE SESSIONS)
HEALTH INFORMATICS AND MEDICAL SYSTEMS (CSCI-RTHI)
Chairs: Prof. Satpreet Singh
           Ardass Corporation, USA & McGeorge School of Law, University of Pacific &
           Northcentral University, San Diego, CA, USA
December 15, 2022 (Thursday); 02:20pm - 03:20pm
(LOCATION: Ballrooms Galleria D-E)

02:20 - 02:40pm: Subject Skin Tone Classification with Implications in Wound
Imaging using Deep Learning
Masrur Sobhan, Daniela Leizaola, Anuradha Godavarty,
Ananda Mohan Mondal
Computing and Information Sciences, Florida International
University, Miami, Florida, USA;
Biomedical Engineering, Florida International University,
Miami, Florida, USA

02:40 - 03:00pm: Free Technical Solutions for Ecological Momentary
Assessments - Searching GitHub Plus Google
Michael Stach, Manfred Reichert, Fabian Prasser, Harald Baumeister,
Winfried Schlee, Peter Heuschmann, Matthias Rose, Rudiger Pryss
Institute of Databases and Information Systems, Ulm University,
Ulm, Germany; Berlin Institute of Health, Charite -
Universitatsmedizin Berlin, Berlin, Germany; Department of
Clinical Psychology and Psychotherapy, Ulm University, Ulm, Germany;
Eastern Switzerland University of Applied Sciences, St. Gallen,
and University of Regensburg, Regensburg, Germany; Institute of
Clinical Epidemiology and Biometry, University of Wurzburg,
Wurzburg, Germany; Department of Psychosomatic Medicine,
Charite Universitatsmedizin Berlin, Berlin, Germany

03:00 - 03:20pm: Data Engineering to Support Intelligence for Precision Medicine
in Intensive Care
Nasim Sadat Mosavi, Manuel Filipe Santos
Information Systems and Technology (Algoritmi Research Center),
University of Minho, Guimaraes, Portugal

03:20 - 03:40pm: BREAK (Refreshments) & POSTERS
(LOCATION: Lotus Ballrooms 2 & 3)

O. Modelling Companion Animals' Well-being based on Activity
    Recognition and Biological Rhythms Monitoring
    Hazar Zilelioglu, Ioana Ocnarescu, Ghazaleh Khodabandelou,
    Clement Bataille, Solene Le Bars
    LISSI Laboratory, University of Paris Est-Creteil (UPEC),
    Capgemini Engineering, Paris, France; Robotics by Design Lab,
    Strate school of Design, Paris, France; Frog Lab, Frog Design,
    Paris, France; Future of Healthcare Program, Capgemini
    Engineering, Paris, France
O. Steady-state Visual Evoked Potential Classifiers for their
    use in Industrial Brain-Computer Interfaces
    Dmitri Bryzgalov, Gaspard Andre
    Capgemini Engineering, Paris, France; Departement
    Mathematiques, Universite Paris Saclay, Paris, France
O. Event Abstraction in Medical Context Using Self Organizing Maps
    Patrick Philipp, Marie Bommersheim
    Fraunhofer Institute of Optronics, System Technologies and
    Image Exploitation IOSB, Fraunhofer Center for Machine Learning,
    Karlsruhe, Germany

O. Nutrient Profiles of Food Items in Adolescent Diet: A Cluster
    Analysis of Data Collected from a High School Citizen Science
    Project
    Jonah T. Treitler, Senait Tekle, Jennifer Ushe, Qing Zeng
    Jefferson High School for Science and Technology, Alexandria,
    Virginia, USA; Department of Clinical Research and Leadership,
    George Washington University, Washington, DC, USA; Alexandria
    City Public Schools, Alexandria, Virginia, USA

O. Monitoring Circadian Rhythms of Night-shift Operators with
    Hidden Markov Models
    Rodrigo Balp, Solene Le Bars
    Altran Technologies, Capgemini Engineering, Meudon, France;
    Altran Lab, Capgemini Engineering, Meudon, France

O. Intelligent Tutoring Systems in Healthcare for Low Literacy
    Population: A survey and the next steps
    Ryan Ackerman, Francisco Icobelli, Renu Balyan
    Math and CIS Deptartment, SUNY Old Westbury, Old Westbury,
    New York, USA; Department of Computer Science, Northeastern
    Illinois University, Chicago, Illinois, USA

O. Data Science to Enhance Research Capacity of a
    Research-Intensive Medical College
    Qingguo Wang, Aize Cao, Vibhuti Gupta, Ashutosh Singhal,
    Todd Gary
    School of Applied Computational Sciences, Meharry Medical
    College, Nashville, Tennessee, USA

O. Proposal of a System Enabling Adaptive Support Based on
    Transition of Each Learner's Source Codes
    Soichiro Sato, Yoshiki Sato, Shoichi Nakamura, Youzou Miyadera
    Tokyo Gakugei University, Japan; Fukushima University, Japan

SESSION 17A-THU: **(CONCURRENT SESSION WITH ON-LINE SESSIONS)**
ARTIFICIAL INTELLIGENCE & APPLICATIONS (CSCI-RTAI)
Chairs: Dr. Yunfeng Shan
Guangxi Science and Technology Normal University, China and iREG, Canada
December 15, 2022 (Thursday); 03:40pm - 05:20pm
(LOCATION: Ballrooms Galleria D-E)

03:40 - 04:00pm: Characterization of Emerging AI Workloads: Neural Logic Machines
                  and Graph Convolutional Networks
                  Cory Davis, Patrick Stockton, Eugene B. John, Zachary Susskind,
                  Lizy K. John
                  The University of Texas at San Antonio, San Antonio, USA;
                  The University of Texas at Austin, Austin, Texas

04:00 - 04:20pm: Cloud-based Sepsis Prediction System with Neural Architecture
                  Search Service
                  Yen-Han Chiang, Hsin-Yu Lee, Yi-Wei Huang, Hui-Shan Chen,
                  Yi-Lun Pan
                  National Center for High-performance Computing, High Performance
                  Computing, Hsinchu City, Taiwan;
                  National Center for High-performance Computing, High Performance
                  Computing, Taichung City, Taiwan

04:20 - 04:40pm: Evaluating the Performance Acceleration of Generalized Linear Solver
                  using Normal Equation on Three Architectures for Tall Skinny Datasets
                  Tran Van Sang, Rie Shigetomi Yamaguchi, Ryosuke Kobayashi,
                  Toshiyuki Nakata
                  The University of Tokyo, Tokyo, Japan

04:40 - 05:00pm: Cardiac Detection using YOLO-v5 with Data Preprocessing
                  Sungjin Lee, Jia Xibin, Ahyoung Lee, Hyo Wook Gil, Sungyeup Kim, Hong Min
                  Department of Software Convergence, Soonchunhyang University, Republic of Korea;
                  Department of Software Convergence, Faculty of IT, Beijng University of Technology,
                  Beijing, P. R. China; Department of Computer Science, Kennesaw State University,
                  Georgia, USA; Department of Internal Medicine, Soonchunhyang University,
                  Cheonan Hospital, Republic of Korea; Department of Research, All for One, Asan,
                  Republic of Korea; Department of SE, Soonchunhyang University, Republic of Korea

05:00 - 05:20pm: Hyperparameters and Features Impacts in Artificial Intelligence
                  Applied to Stock Market
                  Victor Martins de Borba
                  Department of Data Analytics, Harrisburg University of Science
                  and Technology, Harrisburg, USA

SESSION 18A-THU: (CONCURRENT SESSION WITH ON-LINE SESSIONS)
RESEARCH TRACK ON EDUCATION + STEM (CSCI-RTED) + SECURITY (CSCI-RTCW)
Chairs: Dr. Paula Lauren*, Dr. Joshua Stough**
**   * Lawrence Technological University, Michigan, USA**
**   **Bucknell University, Lewisburg, Pennsylvania, USA**
December 15, 2022 (Thursday); 05:20pm – 07:00pm
(LOCATION: Ballrooms Galleria D-E)

05:20 - 05:40pm: Teaching Induction and Deductive Reasoning
                  Peter M. Maurer
                  Department of Computer Science, Baylor University, Waco, Texas, USA

05:40 - 06:00pm: Framework for Developing Cybersecurity Activities for Children in Grades K-5
                  Georgia Tyner, Lila Rajabion
                  School of Graduate Studies, SUNY Empire State College, New York, USA

06:00 - 06:20pm: Experience in Teaching and Engaging Computer Science and Computer
                  Information Systems Students in Active Learning
                  Weizheng Gao, Olumide Malomo, Somasheker Akkaladevi, Ephrem Eyob,
                  Adeyemi A. Adekoya, Shanzhen Gao, Julian D. Allagan
                  Department of Math & CS, College of Natural Sciences & Mathematics,
                  West Virginia State University, West Virginia, USA; Department of
                  Computer Information Systems, Reginald F Lewis College of Business,
                  Virginia State University, Petersburg, Virginia, USA; Department of Math,
                  CS & E Tech., Elizabeth City State University, North Carolina, USA

06:20 - 06:40pm: LACGC: Learning Research Model for Knowledge and Contribution
                  Satpreet Singh
                  Ardass Corporation, Manteca, California, USA

06:40 – 07:00pm: Cyber-Criminals Metrics Engine for Attack Determination on Web
                  Technologies Platforms
                  Olumide Malomo, Shanzhen Gao, Adeyemi A. Adekoya, Ephrem Eyob, Weizheng Gao
                  Department of Computer Information Systems, Reginald F Lewis
                  College of Business, Virginia State University, Petersburg,
                  Virginia, USA; Department of Mathematics and Computer Science,
                  College of Natural Sciences and Mathematics, West Virginia
                  State University, Institute, West Virginia, USA

07:00 - 09:00pm: CONFERENCE RECEPTION DINNER
**   December 15, 2022 (Thursday); 07:00pm - 09:00pm**
**   (LOCATION: Ballrooms Galleria B-C)**

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          ONLINE PRESENTATIONS (DECEMBER 15 - Thursday)
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PLEASE NOTE THAT ALL TIMES MENTIONED IN THIS DOCUMENT ARE IN TERMS OF
LAS VEGAS TIME-ZONE (USA Pacific Time-zone).

The online presentations are scheduled from 08:00am till 09:00pm daily - this
is to serve online speakers, online attendees, and participants who are residing
in different time zones. The conference has also granted the request from the
administrations of 9 institutions to live stream the online sessions for their
classrooms (one connection per classroom / institution).

IMPORTANT: If at all possible, speakers are expected to connect at the begining
           of the session in which their papers are scheduled for presentation.
           This will help the admin of the session to manage the logistical
           process. In case of questions about the online/ZOOM presentations
           during the conference days (Dec. 14-16, 2022), please contact
           csci.zoom@gmail.com

SESSION 6-ONLINE: EDUCATION & STEM (CSCI-RTED) + SECURITY (CSCI-RTCW) +
                  IMAGING SCIENCE (CSCI-RTPC) + COMPUTATIONAL SCIENCE (CSCI-RTCS) +
                  INTERNET OF THINGS (CSCI-RTOT) + SOCIAL NETWORK ANALYSIS &
                  MINING (CSCI-RTNA)
                  Chairs: TBA
                  December 15, 2022 (Thursday); 08:00am – 10:40am
                  (ONLINE - ZOOM)

08:00 - 08:20am: Multi Class Classification of Online Radicalization using
                  Transformer Models
                  Chesta Sofat, Shabeg Singh Gill, Divya Bansal
                  Cyber Security Research Centre, Punjab Engineering College,
                  Chandigarh, India;
                  Indraprastha Institute of Information Technology, Delhi, India

08:20 - 08:40am: Transfer Learning Approach for Multilabel Fine Grain Image
                  Attribute Extraction
                  Gaurav Sharma, Kuruvilla Abraham, Bagyalakshmi V
                  Tata Consultancy Services, India

08:40 - 09:00am: A MOOC on Computational Thinking for All: Pedagogical
                  Principles, Challenges, and their Application
                  Noa Ragonis, Orit Hazzan
                  Faculty of Education, Computer Science Department, Beit Berl
                  College, Beit Berl, Israel; Faculty of Education in Science
                  and Technology, Technion, Haifa, Israel

09:00 - 09:20am: Leveraging Continuous Feedback in Education to Increase
                  C Code Quality
                  Max Schrotter, Bettina Schnor
                  Department of Computer Science, University of Potsdam,
                  Potsdam, Germany

09:20 – 09:40am: Multi-Instance Contingent Fusion for the Verification of
                   Newborn and Infant Fingerprints
                   Tiwalade Odu, Joke Badejo, Tokunbo Ogunfunmi, Aderemi Atayero
                   Department of Electrical and Information Engineering,
                   Covenant University, Ota, Nigeria; Department of Electrical
                   and Computer Engineering, School of Engineering,
                   Santa Clara University, Santa Clara, California, USA

09:40 – 10:00am: Security Analytics Framework Validation based on Threat
                   Intelligence
                   Viktor Sowinski-Mydlarz, Vassil Vassilev, Karim Ouazzane,
                   Anthony Phipps
                   London Metropolitan University Cyber Security Research Centre,
                   London, United Kingdom (UK)

10:00 - 10:20am: Parenthood Mining Using Hashtag Social Network Mining Approach
                   Xiaowen Wang, Mourad Oussalah, Mika Niemela, Tiina Ristikari
                   Center of Computer Vision and Signals Analysis,
                   University of Oulu, Finland; Research Unit of Medical Imaging,
                   Physics and Technology, University of Oulu, Finland; Center
                   for Life-long Health Research Unit, University of Oulu, Finland;
                   Itla Children's Foundation, ITLA, Helsinki, Finland

10:20 – 10:40am: Towards a Smarter IoT Environment with Ethereum Virtual
                   Machine Enabling Ledgers
                   Sandi Gec*, Dejan Lavbi., Vlado Stankovski, Petar Kochovski
                   Faculty of Computer and Information Science,
                   University of Ljubljana, Slovenia

SESSION 7-ONLINE: BIG DATA AND DATA SCIENCE (CSCI-RTBD) +
SOCIAL NETWORK ANALYSIS, SOCIAL MEDIA, & MINING (CSCI-RTNA)
Chairs: TBA
December 15, 2022 (Thursday); 10:40am – 12:40pm
(ONLINE - ZOOM)

10:40 - 11:00am: Using Reinforcement Learning with Transfer Learning to Overcome
                   Smart Building Cold Start
                   Mikhail Genkin, Jenn J. McArthur
                   Department of Architectural Science,
                   Toronto Metropolitan University, Toronto, Canada

11:00 - 11:20am: Cyber-Physical System Based Data Mining and Processing Toward
                   Autonomous Agricultural
                   Abdulrahman M. Abdulghani, Mokhles M. Abdulghani,
                   Wilbur L. Walters, Khalid H. Abed
                   Department of Electrical & Computer Engineering and
                   Computer Science, Jackson State University, Jackson, MS, USA

11:20 – 11:40pm: Knowledge-Infused Dynamic Embedding for Predicting the Severity
                   of Suicidal Ideation in Social Media
                   David M. Lee, Hamidreza Moradi
                   The University of Mississippi Medical Center, Mississippi, USA

11:40 - 12:00pm: A k-Way Partitioning Framework for Compression on Social Networks
                   Chandra N Sekharan, Sridhar Radhakrishnan, Michael R. Nelson
                   Department of Computing Sciences, Texas A&M University
                   Corpus Christi, Texas, USA; School of Computer Science,
                   University of Oklahoma, Norman, Oklahoma, USA

12:00 - 12:20pm: Security and Privacy Challenges in Voice-based Social Networks
                    Youna Jung, Dylan Palmer, Mark Shelton
                    Computer and Information Sciences,
                    Virginia Military Institute, Lexington, Virginia, USA

12:20 – 12:40pm: Using Topological Analysis to Investigate Ture and False
                    Information Diffusion
                    Amin Riazi, Yingfeng Wang
                    Department of Management, University of Tennessee at Chattanooga,
                    Tennessee, USA; Department of Computer Science and Engineering,
                    University of Tennessee at Chattanooga, Tennessee, USA

SESSION 8-ONLINE: CYBER WARFARE, CYBER DEFENSE, & CYBER SECURITY (CSCI-RTCW) +
MOBILE COMPUTING, WIRELESS NETWORKS, & SECURITY (CSCI-RTMC)
Chairs: TBA
December 15, 2022 (Thursday); 12:40pm – 02:20pm
(ONLINE - ZOOM)

12:40 – 01:00pm: Performance Evaluation of Partially Homomorphic Encryption
                    Algorithms
                    George Dimitoglou, Carol Jim
                    Department of Computer Science and IT, Hood College,
                    Frederick, Maryland, USA

01:00 - 01:20pm: An Experimental Evaluation of a Privacy-Preserving Authentication
                    and Authorization Scheme
                    Kai Wang, Tyler Phillips, Xukai Zou
                    Department of Computer Science, Georgia Southern University,
                    Statesboro, Georgia, USA;
                    Department of Computer and Information Science,
                    Indiana University-Purdue University Indianapolis, Indiana, USA

01:20 – 01:40pm: Cyber Warfare and National Security: Imperative for the
                    Nigerian Navy
                    Abdullahi Muhammad Ahmed, Adamu Hussaini, Alhassan Abdulhamid
                    Nigerian Navy, Nigeria; Towson University, USA;
                    University of Bradford, United Kingdom (UK)

01:40 - 02:00pm: Considering the Implications of Artificial Intelligence,
                    Quantum Computing, and Cybersecurity
                    Dominic Rosch-Grace, Jeremy Straub
                    Department of Computer Science, North Dakota State University,
                    Fargo, North Dakota, USA

02:00 – 02:20pm: Mobile AR Application for Navigation and Emergency Response
                    Nishith Reddy Mannuru, Mounica Kanumuru, Sharad Sharma
                    Department of Information Science, University of North Texas,
                    Denton, Texas, USA

SESSION 9-ONLINE: **INTERNET OF THINGS (CSCI-RTOT) + SIGNAL & IMAGE PROCESSING, COMPUTER VISION & PATTERN RECOGNITION (CSCI-RTPC)**
Chairs: TBA
December 15, 2022 (Thursday); 02:20pm - 04:40pm
(ONLINE - ZOOM)

02:20 – 02:40pm: Low-Cost Brain-Computer Interface Design Using Deep Learning for Internet of Brain Controlled Things Applications
Mokhles M. Abdulghani, Wilbur L. Walters, Khalid H. Abed
Department of Electrical & Computer Engineering and Computer Science, Jackson State University (JSU), MS, USA

02:40 - 03:00pm: Humanoid Robot Acceptance: A Systematic Review of Literature
Reilly Moberg, Arshia Khan
Department of Computer Science, University of Minnesota Duluth, Minnesota, USA

03:00 - 03:20pm: Transform Decomposition Switching for Efficient Attribute Compression of 3D Point Clouds Using Neural Networks
Reetu Hooda, W. David Pan, Bernard Benson
Department of Electrical & Computer Engineering, University of Alabama in Huntsville, Alabama, USA;
McLeod Software Corporation, Birmingham, Alabama, USA

03:20 - 03:40pm: Sentence-Level Sign Language Recognition Framework
Atra Akandeh
Circuits, Systems, and Neural Networks (CSANN) Laboratory, Computer Science and Engineering, Michigan State University, East Lansing, Michigan, USA

03:40 - 04:00pm: Maritime UAV Patrol Tasks Based on YOLOv4 Object Detection
Yi-Yu Chang, John A, Pao-Ann Hsiung
Department of Computer Science and Information Engineering, National Chung Cheng University, Minxiong Township, Taiwan

04:00 - 04:20pm: Group-level Analysis of Relations Between Resting-state Functional Connectivity and Arithmetic Ability using CONN
Grace Metri, Xin Yang
Department of Computer Science, Middle Tennessee State University, Murfreesboro, Tennessee, USA

04:20 - 04:40pm: Smart Observer for Distant Water Fishing in Taiwan
P. Karthikeyan, Tan-Khang Luong, Chih Chun Chang, Maram Soni Reddy, Hsiu-Chun Hsu, Pao-Ann Hsiung
Department of Computer Science and Information Engineering, National Chung Cheng University, Chiayi, Taiwan

SESSION 10-ONLINE: HEALTH INFORMATICS AND MEDICAL SYSTEMS (CSCI-RTHI) +
EDUCATION + STEM (CSCI-RTED) + ARTIFICIAL INTELLIGENCE (CSCI-RTAI)
Chairs: TBA
December 15, 2022 (Thursday); 04:40pm - 08:00pm
(ONLINE - ZOOM)

04:40 - 05:00pm: Implementation of Predictive Model for Diarrhea among Afghanistan
Children based on Medical and Non-Medical Attributes
Kittichai Lavangnananda, A. Zahirzada
School of IT, King Mongut's University of Technology Thonburi, Bankok, Thailand

05:00 - 05:20pm: The Impact of Online Support on the Performance of Students Transitioning
to University Mathematics in a Blended Learning Environment
Mary Ruth Freislich, Alan Bowen-James
School of Mathematics & Statistics, University of New South Wales,
Sydney, Australia;
Le Cordon Bleu Business School, Sydney, Australia

05:20 - 05:40pm: Initial Impact of Evidence-based and Experiment-focused Teaching
Approach in a Computer Architecture Course in Computer Science
Md Mahmudur Rahman, Opeyemi Adeniran, Neda Bazyar Shourabi
Computer Science Department, Morgan State University,
Baltimore, Maryland, USA

05:40 - 06:00pm: Student Persistence in the Use of Test Driven Development
John W. Coffey, Steven Bitner
Department of Computer Science, The University of West Florida,
Pensacola, Florida, USA

06:00 - 06:20pm: Industry Connect Initiative: A Preliminary Report on Internships
and the Addition of Technical Career Manager to University
Career Services
Bonnie Achee, Ghassan Alkadi, Sandy Summers, Matthew McNulty, John Burris
Southeastern Louisiana University, Hammond, Louisiana, USA

06:20 - 06:40pm: Networking and Computing: Creating Opportunities for Low Income
Students to Succeed in Computing Careers
Sherri Turner, Anne Hinderliter, Arshia Khan
Department of Educational Psychology, University of Minnesota,
Minneapolis, Minnesota, USA; Chemistry and Biochemistry
Department, University of Minnesota Duluth, Minnesota, USA;
Department of Computer Science, University of Minnesota Duluth, Minnesota, USA

06:40 - 07:00pm: Building Framework and Infrastructure to Assist a Minority
Serving Institution (MSI) in Cybersecurity Program Development
Swapnoneel Roy, O. Patrick Kreidl, Karthikeyan Umapathy,
Zornitza G. Prodanoff, Iman Vakilinia
School of Computing, University of North Florida, Jacksonville,
Florida, USA; School of Engineering, University of
North Florida, Jacksonville, Florida, USA

07:00 - 07:20pm: Data Science to Enhance Research Capacity of a Research-Intensive
Medical College
Qingguo Wang, Aize Cao, Vibhuti Gupta, Ashutosh Singhal, Todd Gary
School of Applied Computational Sciences,
Meharry Medical College, Nashville, Tennessee, USA

07:20 - 07:40pm: Artificial Intelligence Role in Chronic Condition Decision Extrapolation
Atif Farid Mohammad, Mike Boese, Amruta Gandhe, Ishdeep Kaur, Ramyaa Ganesh
Data Science & AI/ML, Apexon Inc., Texas, USA

07:40 - 08:00pm: Artificial Intelligence use in Congestive Heart Failure Mid-Term Findings
Atif Farid Mohammad, Rajan Vanjani, Jagadisan Suresh
Apexon, Plano, Texas, USA

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                        DECEMBER 16, 2022
THERE ARE TWO SETS OF CONCURRENT SESSIONS ON December 16, 2022 (FRIDAY);
ONE SET OF SESSIONS (ON-SITE PRESENTATIONS) WILL BE HELD IN BALLROOMS
GALLERIA D-E AND THE OTHER SET OF SESSIONS WILL BE ONLINE (THE ZOOM LINK
IS ALREADY PROVIDED TO SPEAKERS AND ALL REGISTERED AUTHORS).


7:00am - 5:00pm:  REGISTRATION
                  (LOCATION: Lotus Ballrooms 2 & 3)


07:00 - 08-00am:  CONTINENTAL BREAKFAST
                  (LOCATION: Lotus Ballrooms 2 & 3)



                  ON-SITE PRESENTATIONS & ACTIVITIES (DECEMBER 16, Friday)
                  LOCATION: Ballrooms Galleria D-E
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SESSION 19A-FRI:  (CONCURRENT SESSION WITH ON-LINE SESSIONS)
                  ARTIFICIAL INTELLIGENCE & CYBER WARFARE, CYBER DEFENSE, &
                  CYBER SECURITY (CSCI-RTCW) & IMAGING SCIENCE
                  Chairs: Dr. Haydar Teymourlouei* & Dr. Weizheng Gao**
                          *Cyber Security Specialist, Department of Technology & Security,
                            Bowie State University, Maryland, USA;
                          ** West Virginia State University. USA
                  December 16, 2022 (Friday); 08:00am - 10:20am
                  (LOCATION: Ballrooms Galleria D-E)


08:00 - 08:20am:  On Unsupervised Reconstruction with Dressed Multilayered
                  Variational Quantum Circuits
                  Pablo Rivas, Liang Zhao
                  School of Engineering and Computer Science, Department of
                  Computer Science, Baylor University, Waco, Texas, USA;
                  Marketing Department, St. Ambrose University, Davenport, Iowa, USA


08:20 - 08:40am:  Ada-Thres: An Adaptive Thresholding Method to Mitigate the
                  False Alarms
                  Jayesh Soni, Nagarajan Prabakar, Himanshu Upadhyay
                  Florida International University, Florida, USA


08:40 - 09:00am:  SREP+SAST: A Comparison of Tools for Reverse Engineering Machine
                  Code to Detect Cybersecurity Vulnerabilities in Binary Executables
                  Thomas Ryan Devine, Maximillian Campbell, Mallory Anderson,
                  Dale Dzielski
                  Lane Department of Computer Science and Electrical Engineering,
                  West Virginia University, Morgantown, West Virginia, USA


09:00 - 09:20am:  A Multiagent CyberBattleSim for RL Cyber Operation Agents
                  Thomas Kunz, Christian Fisher, James La Novara-Gsell,
                  Christopher Nguyen, Li Li
                  Systems and Computer Engineering, Carleton University,
                  Ottawa, Canada;
                  Defence Research and Development Canada, Ottawa, Canada


09:20 - 09:40am:  Preventing Data Breaches: Utilizing Log Analysis and Machine
                  Learning for Insider Attack Detection
                  Haydar Teymourlouei, Vareva E. Harris
                  Department of Technology & Security, Bowie State University,
                  Bowie, Maryland, USA;
                  Criminal Justice Adminstartion & Center for Cyberseucrity,
                  Benedict College, Columbia, South Carolina, USA
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09:40 - 10:00am: SMS Malware Detection: A Machine Learning Approach
                  Heather Broome, Yaju Shrestha, Nyzaireyus Harrison, Nick Rahimi
                  School of Computing Sciences & Computer Engineering,
                  University of Southern Mississippi, Hattiesburg, Mississippi, USA

10:00 – 10:20am: Deep Learning Based Multimodal Image Retrieval Combining Image and Text
                  Md Imran Sarker, Mariofanna Milanova
                  Department of Computer Science, University of Arkansas at Little Rock,
                  Arkansas, USA

**SESSION 20A-FRI: (CONCURRENT SESSION WITH ON-LINE SESSIONS)
                    SMART CITIES AND SMART MOBILITY (CSCI-RTSC)
                    Chairs: Prof. Dr. Lena Altherr* & Patrick Philipp****
                            *FH Aachen University of Applied Sciences,
                            Faculty of Electrical Engineering and Information Technology,
                            Aachen, Germany;
                            **Fraunhofer Institute of Optronics, System Technologies and
                            Image Exploitation IOSB, Fraunhofer Center for Machine Learning,
                            Karlsruhe, Germany
                    December 16, 2022 (Friday); 10:20am - 11:20am
                    (LOCATION: Ballrooms Galleria D-E)

10:20 - 10:40am: Fallacies in the Implementation of a Local Micro Smart Grid
                  Steffen Spathe, Peter Conrad
                  Faculty of Mathematics and Computer Science,
                  Friedrich Schiller University Jena, Germany

10:40 - 11:00am: Reaching Sustainable Development Goals Through Tax Reductions and Incentives
                  within a Trustworthy Decentralized Autonomous Organization
                  Petar Kochovski, Vlado Stankovski, Sandi Gec, Maja Klun, Iga Kotnik
                  Faculty of Computer and Information Science, University of
                  Ljubljana, Slovenia;
                  Faculty of Public Administration, University of Ljubljana, Slovenia

11:00 - 11:20am: Modeling of DC House Distribution Network
                  Lauren Rotsios, Taufik Taufik, Siddharth Vyas, Majid Poshtan,
                  Ali Dehghan Banadaki
                  Electrical Engineering Department, California Polytechnic
                  State University, San Luis Obispo, California, USA

**SESSION 21A-FRI: (CONCURRENT SESSION WITH ON-LINE SESSIONS)
                    COMPUTATIONAL INTELLIGENCE (CSCI-RTCI)
                    Chairs: Dr. Jayesh Soni**
                            Florida International University, USA
                    December 16, 2022 (Friday); 11:20am - 12:20pm
                    (LOCATION: Ballrooms Galleria D-E)

11:20 - 11:40am: Stacked Differential Evolution for Data Envelopment Analysis
                  Pavel Kromer, Maryam Olfati
                  Department of Computer Science, VSB-Technical University
                  of Ostrava, Ostrava, Czech Republic

11:40 - 12:00pm: Sampling Strategies for Exploratory Landscape Analysis of
                  Bi-Objective Problems
                  Pavel Kromer, Vojtech Uher, Andrejaana Andova, Tea Tusar,
                  Bogdan Filipic
                  Department of Computer Science, VSB - Technical University
                  of Ostrava, Czech Republic; Department of Intelligent Systems,
                  Jozef Stefan Institute and Jozef Stefan International
                  Postgraduate School, Ljubljana, Slovenia

12:00 - 12:20pm: Noise Suppression Using Gated Recurrent Units and Nearest
                  Neighbor Filtering
                  Arghavan Asad, Rupinder Kaur, Farah Mohammadi
                  Department of Electrical and Computer Engineering,
                  Toronto Metropolitan University, Toronto, Canada

12:20 - 01:00pm: LUNCH (On Your Own)

SESSION 22A-FRI: (CONCURRENT SESSION WITH ON-LINE SESSIONS)
RESEARCH TRACK ON EDUCATION + STEM (CSCI-RTED)
Chairs: Dr. Navid Shaghaghi*, Mr. Steffen Spathe**
                  ***Ethical, Pragmatic, and Intelligent Computing (EPIC) Laboratory Director,**
                  College of Arts & Sciences and School of Engineering,
                  Santa Clara University, California, USA
                  **** Friedrich-Schiller-University Jena, Germany**
December 16, 2022 (Friday); 01:00pm - 01:40pm
(LOCATION: Ballrooms Galleria D-E)

01:00 - 01:20pm: Improving Autonomous Systems Education: A Literature Survey
                  James I. Maher, Shannon Beck, Adrian A. de Freitas, Troy Weingart
                  Department of Computer and Cyber Science,
                  United States Air Force Academy, USAF Academy, Colorado, USA

01:20 - 01:40pm: Developing Effective Cybersecurity Labs: Initiating the
                  Conversation
                  Glen Sagers
                  Department of Computer Science and Information Security,
                  Southern Utah University, Cedar City, Utah, USA

SESSION 23A-FRI: (CONCURRENT SESSION WITH ON-LINE SESSIONS)
ARTIFICIAL INTELLIGENCE & APPLICATIONS (CSCI-RTAI)
Chairs: Dr. Jayesh Soni* & Dr. Vijayarangan Natarajan**
                  ***Florida International University, USA;**
                  **** Tata Consultancy Services Limited, India**
December 16, 2022 (Friday); 01:40pm - 03:20pm
(LOCATION: Ballrooms Galleria D-E)

01:40 - 02:00pm: Enabling a Network AI Gym for Autonomous Cyber Agents
                  Li Li, Jean-Pierre S. El Rami, Adrian Taylor,
                  James Hailing Rao, Thomas Kunz
                  Defence Research & Development Canada, Ottawa, Canada;
                  Department of Electrical and Computer Engineering,
                  Queen's University, Kingston, Canada; Department of Systems
                  & Computer Engineering, Carleton University, Ottawa, Canada

02:00 - 02:20pm: Component-Wise Natural Gradient Descent on Deep Neural Networks
                  Tran Van Sang, Rie Shigetomi Yamaguchi, Mhd Irvan, Toshiyuki Nakata
                  University of Tokyo, Tokyo, Japan

02:20 - 02:40pm: Application of Multi-Task Learning for Abnormal Diagnosis and
                  Trip Variable Prediction in Nuclear Power Plants
                  Hye Seon Jo, Ji Hun Park, Man Gyun Na
                  Department of Nuclear Engineering, Chosun University,
                  Dong-gu, Gwangju, Republic of Korea

02:40 - 03:00pm: What a Drag! Streamlining the UAV Design Process with Design
                  Grammars and Drag Surrogates
                  Michael Sandborn, Carlos Olea, Anwar Said, Mudassir Shabbir,
                  Peter Volgyesi, Xenofon Koutsoukos, Jules White
                  Vanderbilt University, Nashville, Tennessee, USA

03:00 - 03:20pm: To Shuffle or Not to Shuffle: Mini-Batch Shuffling Strategies
                   for Multi-class Imbalanced Data Classification
                   Yuwei Mao, Vishu Gupta, Kewei Wang, Wei-Keng Liao,
                   Alok Choudhary, Ankit Agrawal
                   Department of Electrical and Computer Engineering,
                   Northwestern University, Evanston, Illinois, USA

03:20 - 03:40pm: **BREAK (Refreshments) & POSTERS**
                   (LOCATION: Lotus Ballrooms 2 & 3)

                   O. Study of Ultrasonic Data Collection System for Anomaly
                       Detection on Mechanical Equipment
                       Rio Shigyo, Daiki Nobayashi, Kazuya Tsukamoto,
                       Mitsunori Mizumachi, Takeshi Ikenaga
                       Kyushu Institute of Technology, Fukuoka, Japan
                   O. 5G Reference IoT Board for Smart Farm
                       So-Young Kwon, Young-Hyung Kim, Dong-Soo Jung, Ki-Ryong Cha,
                       Yong-Hwan Lee
                       School of Electronic Engineering, Kumoh National Institute
                       of Technology, Gumi, Korea; Department of IT Convergence,
                       Kumoh National Institute of Technology, Gumi, Korea;
                       Raonsolution, Gumi, Korea; Sungun Materials, Gumi, Korea
                   O. Detecting Anomalous Energy Consumptions in Smart Buildings - an
                       Overview of two Unsupervised Techniques as a Starting Point
                       for our Research
                       Cindy Mund, Lena Charlotte Altherr
                       Electrical Engineering and Information Technology, FH Aachen
                       University of Applied Sciences, Aachen, Germany
                   O. Performance Evaluation on the Parallel Processing System with
                       the Raspberry Pi 4
                       Hyunseung Han, Kyungha Kim, Seungwoo Jung, Yunseok Chang
                       Department of Computer Engineering, Daejin University, Pocheon,
                       Republic of Korea
                   O. Synthesizing a Reference Image from the Macro Images of a
                       Painting for Vignetting Correction
                       Soonchul Jung, Jae Woo Kim, Yoon-Seok Choi, Hyeong-Ju Jeon,
                       Jin-Seo Kim
                       Content Research Division, Electronics and Telecommunications
                       Research Institute, Republic of Korea
                   O. Deep Learning-based Synthesized Image Attribution Using
                       Frequency Distribution Information
                       Junbin Zhang, Yixiao Wang, Hamid Reza Tohidypour,
                       Panos Nasiopoulos
                       Department of Electrical and Computer Engineering,
                       University of British Columbia, Vancouver, Canada
                   O. Design a Hardware of Image Stitching using LBP Algorithm
                       Chang-Yong Lee, Yong-Hwan Lee (Minjun Cho)
                       Department of Electronic Engineering, Kumoh National Institute
                       of Technology, Korea; School of Electronic Engineering,
                       Kumoh National Institute of Technology, Korea

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SESSION 24A-FRI:   (CONCURRENT SESSION WITH ON-LINE SESSIONS)
                   SIGNAL & IMAGE PROCESSING, COMPUTER VISION & PATTERN RECOGNITION
                   (CSCI-RTPC) + CYBER-Physical Systems
                   Chairs: Prof. Shanzhen Gao
                           Virginia State University, USA
                   December 16, 2022 (Friday); 03:40pm - 05:20pm
                   (LOCATION: Ballrooms Galleria D-E)
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03:40 - 04:00pm: Deep-RSI: Deep Learning for Radiographs Source Identification
                   Farid Ghareh Mohammadi, Ronnie Sebro
                   Department of Radiology, Mayo Clinic, Jacksonville, Florida, USA;
                   Center for Augmented Intelligence, Mayo Clinic, Jacksonville, Florida, USA

04:00 - 04:20pm: Performance Analysis of Geo-fencing Effect for Intruder Monitoring
                   Young-il Kim, Park Seong Hee, Heo Tae-Wook, Lee Tae-Chong,
                   Yong-Hyun Yeun, Kim Seung Tae
                   Electronics & Telecommunication Research Institute, Daejeon, Korea;
                   MGT, Daejeon, Korea; MSOTEK, Daejeon, Korea;
                   Agency for Defense Development, Daejeon, Korea

04:20 - 04:40pm: Nostrils and Mouth Detection for Drivers Using Convolutional
                   Neural Networks With Automatically Generated Ground Truth Data
                   Sorin Valcan, Mihail Gaianu
                   West University of Timisoara, Romania;
                   Continental Automotive Romania, Timisoara, Romania

04:40 - 05:00pm: Nano-Resolution Visual Identifiers Enable Secure Monitoring in
                   Next-Generation Cyber-Physical Systems
                   Hao Wang, Xiwen Chen, Abolfazl Razi, Michael Kozicki, Rahul Amin, Mark Manfredo
                   School of Computing, Clemson University, South Carolina, USA;
                   School of Electrical, Computer and Energy Engineering, Arizona State University,
                   Arizona, USA; Morrison School of Agribusiness, Arizona State University,
                   Arizona, USA; MIT Lincoln Laboratory, Massachusetts Institute of Technology,
                   Massachusetts, USA

05:00 - 05:20pm: An Unsupervised Object Localization Based on Topological
                   Data Analysis
                   Hong Cheng
                   Department of Math and Computer Science, Southern Arkansas
                   University, Magnolia, Arkansas, USA


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SESSION 25A-FRI:   (CONCURRENT SESSION WITH ON-LINE SESSIONS)
                   COMPUTATIONAL SCIENCE (CSCI-RTCS) + DATA SCIENCE (CSCI-RTBD)
                   Chairs: Dr. Weizheng Gao
                           West Virginia State University. USA
                   December 16, 2022 (Friday); 05:20pm - 06:40pm
                   (LOCATION: Ballrooms Galleria D-E)
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05:20 - 05:40pm: Dynamic Text Modeling and Categorization Framework based on
                   Semantics Extraction and Similarity Checking
                   Gaukhar Dauzhan, Alisher Iskakov, Miras Kenzhegaliyev, Dinh-Mao Bui
                   Computer Science Department, School of Engineering and
                   Digital Sciences, Nazarbayev University, Astana, Kazakhstan

05:40 - 06:00pm: A Modeling Strategy using Sequential Bayesian Optimization
                   with POMDP for Exploration and Informative Path Planning of
                   UAVs in Monitoring of Forest with Canopy Gap
                   Marcela Aparecida Aniceto Dos Santos,
                   Kelen Cristiane Teixeira Vivaldini
                   Department of Computer Science, Federal University of Sao Carlos, Brazil

06:00 - 06:20pm: Comprehensive Review of the Informative Path Planning,
                    Autonomous Exploration and Route Planning using UAV in
                    Environment Monitoring
                    Marcela Aparecida Aniceto dos Santos,
                    Kelen Cristiane Teixeira Vivaldini
                    Department of Computer Science, Federal University of Sao Carlos,
                    Brazil

06:20 - 06:40pm: Computation in Markoff-Hurwitz Equations III
                    Shanzhen Gao
                    Department of Computer Information Systems, Reginald F Lewis
                    College of Business, Virginia State University,
                    Petersburg, Virginia, USA

06:40 - 07:00pm: CLOSING REMARKS:
                    Professor Emeritus Hamid R. Arabnia
                    School of Computing, University of Georgia, USA;
                    Editor-in-Chief, The Journal of Supercomputing (Springer);
                    Editor, Transactions of Computational Science & Computational
                    Intelligence (Springer)
                    (LOCATION: Ballrooms Galleria D-E)

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                ONLINE PRESENTATIONS (DECEMBER 16 - Friday)
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PLEASE NOTE THAT ALL TIMES MENTIONED IN THIS DOCUMENT ARE IN TERMS OF
LAS VEGAS TIME-ZONE (USA Pacific Time-zone).

The online presentations are scheduled from 08:00am till 09:00pm daily - this
is to serve online speakers, online attendees, and participants who are residing
in different time zones. The conference has also granted the request from the
administrations of 9 institutions to live stream the online sessions for their
classrooms (one connection per classroom / institution).

IMPORTANT: If at all possible, speakers are expected to connect at the begining
           of the session in which their papers are scheduled for presentation.
           This will help the admin of the session to manage the logistical
           process. In case of questions about the online/ZOOM presentations
           during the conference days (Dec. 14-16, 2022), please contact
           csci.zoom@gmail.com

SESSION 11-ONLINE: COMPUTATIONAL SCIENCE INCLUDING:
                   EDUCATION & STEM (CSCI-RTED) + HPC (CSCI-RTPD) +
                   HEALTH INFORMATICS & MEDICAL SYSTEMS (CSCI-RTHI) +
                   SOFTWARE ENGINEERING (CSCI-RTSE) + SMART CITIES (CSCI-RTSC)
                   Chairs: TBA
                   December 16, 2022 (Friday); 08:00am - 11:00am
                   (ONLINE - ZOOM)

08:00 - 08:20am: Data Driven Characterization and Predictive Classification
                   of Energy Economy for Public Transport
                   Roman Sennefelder, Ruben Martin-Clemente, Ramon Gonzalez-Carvajal
                   Research & Development, EVO Engineering GmbH, Munich, Germany;
                   Electronics Engineering Department, Universidad de Sevilla,
                   Seville, Spain

08:20 - 08:40am: Towards a Generic Framework for GPU-Parallelized Simulations
                   of Light-Driven Particles
                   Florian Fey, Sergei Gorlatch
                   University of Muenster, Germany

08:40 - 09:00am: Evaluation of an Automated Mapping from ICD-10 to SNOMED CT
                   Patrick Philipp, Julia Veloso de Oliveira, Arno Appenzeller,
                   Tobias Hartz, Juergen Beyerer
                   Vision and Fusion Laboratory IES, Karlsruhe Institute of
                   Technology KIT, Karlsruhe, Germany;
                   Klinisches Krebsregister Niedersachen, Hannover, Germany;
                   Fraunhofer Institute of Optronics, System Technologies and
                   Image Exploitation IOSB, Fraunhofer Center for Machine Learning,
                   Karlsruhe, Germany

09:00 - 09:20am: Modelling Companion Animals' Well-being based on Activity
                   Recognition and Biological Rhythms Monitoring
                   Hazar Zilelioglu, Ioana Ocnarescu, Ghazaleh Khodabandelou,
                   Clement Bataille, Solene Le Bars
                   LISSI Laboratory, University of Paris Est-Creteil (UPEC),
                   Capgemini Engineering, Paris, France;
                   Robotics by Design Lab, Strate school of Design, Paris, France;
                   Frog Lab, Frog Design, Paris, France; Future of Healthcare
                   Program, Capgemini Engineering, Paris, France
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09:20 - 09:40am:   Event Abstraction in Medical Context Using Self Organizing Maps
                   Patrick Philipp, Marie Bommersheim
                   Fraunhofer Institute of Optronics, System Technologies and
                   Image Exploitation IOSB, Fraunhofer Center for
                   Machine Learning, Karlsruhe, Germany

09:40 - 10:00am:   A Research Agenda for Embedding 4IR Technologies in the
                   Leadership Management of Formal Methods
                   John Andrew van der Poll
                   Digital Transformation and Innovation, Graduate School of
                   Business Leadership (SBL), University of South Africa (Unisa),
                   Midrand, South Africa

10:00 - 10:20am:   GreenWebAdvisor: Discovering and Recommending Hidden
                   Eco-Design Best-practices
                   Moussa Aboubakar, Moubarak Zoure, Ines Ben Kraiem,
                   Mouna Ben Mabrouk
                   Sogeti, France

10:20 - 10:40am:   Forensic Technologies to Automate the Acquisition of
                   Digital Evidences
                   David Garcia, Llanos Tobarra, Antonio Robles-Gomez,
                   Rafael Pastor-Vargas
                   Departamento de Sistemas de Comunicacion y Control,
                   Escuela Tecnica Superior de Ingenieria Informatica,
                   Universidad Nacional de Educacion a Distancia (UNED),
                   Madrid, Spain

10:40 - 11:00am:   Differences Between Neurodivergent and Neurotypical Learning
                   during Covid-19: Towards the E-tivities Satisfaction Scale
                   Jonathan Bishop, Kamal Bechkoum
                   Crocels Research CIC, United Kingdom (UK);
                   University of Gloucestershire, United Kingdom (UK)


SESSION 12-ONLINE: EDUCATION & STEM (CSCI-RTED) + HEALTH INFORMATICS &
                   MEDICAL SYSTEMS (CSCI-RTHI) + ARTIFICIAL INTELLIGENCE (CSCI-RTAI)
                   Chairs: TBA
                   December 16, 2022 (Friday); 11:00am - 04:00pm
                   (ONLINE - ZOOM)

11:00 - 11:20am:   Keeping Capstone Project Current with Technology
                   Hong Wang, Mason Huelskamp, Jakob Stober, Joshua Taylor,
                   Amanda Joyner, Tyler Westhoven
                   Engineering Technology, The University of Toledo, Ohio, USA

11:20 - 11:40am:   A Set of Machine-Learning Exercises
                   Mehdi Zargham, Jie Cheng
                   Department of Computer Science, University of Dayton, Ohio, USA;
                   Department of Computer and Information Technology,
                   Miami University, Ohio, USA

11:40 - 12:00pm:   Exploring Emotional Stimulation to Better Address BPSD:
                   Analysis of Heart Rate Variability, Electrodermal Activity, Mood
                   Alterations and its Ethical Implications of in Dementia Care
                   Yumna Anwar, Arshia Khan
                   Department of Computer Science, University of Iowa, Iowa, USA;
                   Department of Computer Science, University of Minnesota Duluth,
                   Minnesota, USA
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12:00 - 12:20pm: Neuro-Respiratory and Mechanical Ventilation Methodologies for
                   Exploring Human Cognitive Overload
                   Mokhles M. Abdulghani, Wilbur L. Walters, Khalid H. Abed
                   Department of Electrical & Computer Engineering & Computer Science,
                   Jackson State University, Jackson, MS, USA

12:20 - 12:40pm: Explainable A.I. in Healthcare
                   Hritik Rao, Arshia Khan
                   Computer Science Department, University of Minnesota Duluth,
                   Minnesota, USA

12:40 - 01:00pm: Assessments Tools and Types of Therapies for Motor Skills
                   Enhancement in the Elderly with Dementia
                   Isra Hassan, Arshia Khan
                   Computer Science Department, University of Minnesota Duluth,
                   Minnesota, USA

01:00 - 01:20pm: Effects of Individual Cognitive Stimulation Therapy on People
                   with Dementia: A PRISMA- Guided Systematic Review
                   Alfia Pervez, Arshia Khan
                   Computer Science Department, University of Minnesota Duluth,
                   Minnesota, USA

01:20 - 01:40pm: Improved Navigation for Social Robots Through Process Offloading
                   Maryam Kameli, Thomas Zurales, Arshia Khan
                   Department of Computer Science, University of Minnesota Duluth,
                   Minnesota, USA

01:40 - 02:00pm: Effects of Emotion Therapies on People with Dementia:
                   A PRISMA-guided Systematic Review
                   Sakina Rao, Arshia Khan
                   Department of Computer Science, University of Minnesota, Duluth,
                   Minnesota, USA

02:00 - 02:20pm: Covid-19 Prevention Online Information Systems
                   Tyson Howard, Zizhong John Wang
                   Department of Computer Science, Virginia Wesleyan University,
                   Virginia Beach, Virginia, USA

02:20 - 02:40pm: Generalized Pandemic Equation for Monitoring COVID-19
                   Michael Shur
                   Electric Computer and Systems Engineering,
                   Rensselaer Polytechnic Institute, Troy, New York, USA

02:40 - 03:00pm: Implementation Roadmap for Neural Networks in Array Databases
                   Otoniel Jose Campos Escobar, Peter Baumann
                   Jacobs University Bremen, Bremen, Germany

03:00 – 03:20pm: FREE SLOT

03:20 - 03:40pm: FREE SLOT

03:40 - 04:00pm: FREE SLOT

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LIST OF PRE-RECODED PRESENTATIONS / POST-CONFERENCE
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Due to challenges with the pandemic, authors and speakers were given the
following options:

OPTION 1: Presenting the paper on site at the congress.
OPTION 2: Presenting the paper remotely: using Zoom (interactive).
OPTION 3: Presenting the paper remotely (non-interactive).
        The link to these pre-recorded presentations will later be included in
        the "Book of Abstracts" and will be made available on the CSCI 2022 web
        site at (https://www.american-cse.org/csci2022/).

The list that appears below includes all those papers and posters whose authors
will likely be providing pre-recorded presentations.

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RESEARCH TRACK ON ARTIFICIAL INTELLIGENCE (CSCI-RTAI)
https://american-cse.org/csci2022/RTAI
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O. CLPL: A Self-supervised Contrastive Learning Pseudo-Labeling Framework for
    Tabular Data
    Abolfazl Farahani, Navid Hashemi Tonekaboni, Khaled Rasheed, Hamid R. Arabnia
    School of Computing, University of Georgia, Athens, Georgia, USA;
    Department of Computer Science, College of Charleston, Charleston,
    South Carolina, USA

O. High-Dimensional Probabilistic Time Series Prediction via Wavenet+t
    Xiuxuan Sun, Jianhua Chen
    Division of Computer Science & Engineering, Louisiana State University,
    Baton Rouge, Louisiana, USA

O. Unsupervised Machine Learning Methods for Diagnosing Autism Spectrum Disorder
    Using Multimodal Data: A Survey
    Antika Roy, Pablo Rivas, Mahee Noor Tayba
    Rivas.AI Lab, USA; School of Engineering and Computer Science, Department
    of Computer Science, Baylor University, Waco, Texas, USA;
    Department of Computer Science, Baylor University, Waco, Texas, USA

O. Reconstructing Word Representations from Pre-trained Subword Embeddings
    Paula Lauren
    Department of Mathematics and Computer Science,
    Lawrence Technological University, Southfield, Michigan, USA

O. On Unsupervised Reconstruction with Dressed Multilayered Variational
    Quantum Circuits
    Pablo Rivas, Liang Zhao
    School of Engineering and Computer Science, Department of Computer Science,
    Baylor University, Waco, Texas, USA;
    Marketing Department, St. Ambrose University, Davenport, Iowa, USA

O. A Comparative Analysis of State-of-the-Art Time Series Forecasting Algorithms
    Cathal Murray, Priyanka Chaurasia, Lynsey Hollywood, Damien Coyle
    School of Computing, Engineering & Intelligent Systems, Ulster University,
    Londonderry, United Kingdom (UK); Department of Hospitality & Tourism
    Management, Ulster University, Belfast, United Kingdom (UK)

O. Effects of Selection Bias on Online Adversarial Aware SVM When Facing
    an Evasion Attack
    Victor Barboza Morais, Pradeep Chowriappa
    Program of Computer Science, Louisiana Tech University, Ruston, Louisiana, USA

O. Reinforcement Learning Agent Design and Optimization with Bandwidth
    Allocation Model
    Rafael F. Reale, Joberto S. B. Martins
    Program in Systems and Product Engineering - PPGESP, Federal Institute of
    Bahia - IFBA, Valenca, Brazil; Computer Science Graduate Program - PPGCOMP,
    Salvador University - UNIFACS, Salvador, Brazil

O. Comparisons of Machine Learning Methods for Human Activity Recognition
    Using Pseudo-Free-Living Data
    Enas E. Alkhoshi, Khaled M. Rasheed, Hamid R. Arabnia, Frederick W. Maier,
    Jennifer L. Gay
    School of Computing, University of Georgia, USA; Shaqra University, Shaqra,
    Saudi Arabia; Institute for Artificial Intelligence, University of
    Georgia, USA; Department of Health Promotion & Behavior,
    University of Georgia, USA

O. A Framework of Soft Sensor Systems with Machine Learning
    Woo Young Moon, Soo Dong Kim
    Degital Platform Group, SK Inc., Seongnam-si, Gyeonggi-do, Korea;
    School of Software, Soongsil University, Seoul, Korea

O. Service Chatbots and International Students: A Systematic Review
    Sonipriya Paul (Dr. Lydia Ray)
    Department of Computer Science, Columbus State University, Georgia, USA

O. A Method based on Deep Neural Network for Instance Segmentation of Retinal
    Lesions caused by Diabetic Retinopathy
    Carlos Santos, Marilton Aguiar, Daniel Welfer, Marcelo Silva,
    Alejandro Pereira, Marcelo Ribeiro, Bruno Belloni
    Computer Center, Federal Institute of Education, Science and Technology
    Farroupilha, Alegrete, Brazil; Postgraduate Program in Computing, Federal
    University of Pelotas, Pelotas, Brazil; Postgraduate Program in Computer
    Science, Federal University of Santa Maria, Santa Maria, Brazil;
    Federal University of Pelotas, Pelotas, Brazil; Federal Institute of
    Education, Science and Technology Sul-Rio-Grandense, Passo Fundo, Brazil

O. An Evaluation of Machine Learning and Deep Learning Approach on Ekman
    Sentiment Classification
    Abdou Aziz Ledoux Ngou Njikam, Elie Fute Tagne, Lionel Landry Sop Deffo
    Nanjing University of Science and Technology, Nanjing, P. R. China;
    University of Buea, Cameroon;
    University of Dschang, Dschng, Cameroon; Telecom Paris, France

O. Epileptic Seizure Electroencephalography Signal Classification Using
    Machine Learning Algorithm
    Zheng You Lim, Yong Li Neo
    Faculty of Engineering and Technology, Multimedia University, Melaka, Malaysia;
    Malacca Expartriate School, Melaka, Malaysia

O. Preliminary Results of Applying Transformers to Geoscience and Earth
    Science Data
    Uko Ebreso, Justin Delgado, Yulia Kumar, Jenny Li, Patricia A Morreale
    Kean University, Union, New Jersey, USA

O. Autonomous Sprinkler System with MAPE-K
    Mira Kim, Jennifer Jin
    IBM Automation, International Business Machines Corporation
    Costa Mesa (IBM), California, USA;
    Computer Science and Engineering, California State University,
    San Bernandino, California, USA

O. A Study of Model Based and Model Free Offline Reinforcement Learning
    Indu Shukla, Haley Dozier, Althea C. Henslee
    Information Technology Laboratory, Engineer Research and
    Development Center (ERDC), U.S. Army Engineer Research and
    Development Center, Vicksburg, Mississippi, USA

O. Challenges of Self-Supervised Learning for Unified, Multi-Modal,
    Multi-Task Transformer Models
    Graham Annett, Tim Andersen, Robert Annett
    Computer Science, Boise State University, Boise, Idaho, USA;
    Health Sciences Center, University of New Mexico, Albuquerque,
    New Mexico, USA

O. Proposal of a Method for Inferring the Road Surface from Vibration Using
    Deep Learning on CanSat
    Takuya Saito, Miho Akiyama
    Faculty of Informatics, Tokyo University of Information Sciences, Chiba, Japan;
    Graduate School of Electrical and Information Engineering, Shonan Institute of
    Technology, Fujisawa, Japan

O. Machine Learning Algorithms for Natural Language Processing Tasks:
    A Case of COVID-19 Twitter data (Thailand)
    Kunyanuth Kularbphettong, Rujijan Vichivanives, Pannawat Kanjanaprakarn,
    Kanyarat Bussaban, Jaruwan Chutrtong, Nareenart Ruksuntorn
    Suan Sunandha Rajabhat University, Bangkok, Thailand

O. Machine Learning Opportunities for Improving Logistics within the Army
    Joseph E. Jabour, Arnold L. Thomas, Indu Shukla, Brandon E. Hansen,
    Haley R. Dozier, Ian D. Detwiller, Althea C. Henslee
    US Army Engineer Research and Development Center, Vicksburg, Mississippi, USA

O. Designing of Prompts for Hate Speech Recognition with In-Context Learning
    Lawrence Han, Hao Tang
    Ridge High School, Basking Ridge, New Jersey, USA;
    Computer Information Systems, The City University of New York,
    New York City, New York, USA

O. Intelligent Processing of Judicial Documents Based on Deep Learning
    Jingzi Wang, Chao-Lin Liu
    Department of Computer Science, National Chengchi University, Taipei, Taiwan

O. Experimental Study on Decision Fusion Parameters using Alpha Integration
    Addisson Salazar, Gonzalo Safont, Luis Vergara
    Institute of Telecommunications and Multimedia Applications,
    Universitat Politecnica de Valencia, Valencia, Spain

RESEARCH TRACK ON COMPUTATIONAL INTELLIGENCE (CSCI-RTCI)
https://american-cse.org/csci2022/RTCI
==

O. Accuracy Analysis of Supervised and Unsupervised Techniques on Breast
    Cancer Datasets
    Elham Jahanpeikar, Mahdi Ebrahimi
    Department of Computer Science, California State University, Northridge,
    Los Angeles, California, USA

O. Stress Detection Using Physiological Signals Based On Machine Learning
    Ashmita Hota, Sung-Won Park
    Department of Electrical Engineering and Computer Science,
    Texas A&M University-Kingsville, Texas, USA

O. Automatic Music Mastering using Deep Learning
    Jared Smit, Byeong Kil Lee
    Department of Electrical and Computer Engineering, The University of Colorado,
    Colorado Springs (UCCS), Colorado, USA

O. Survey and Comparison of Nature Inspired Optimization Algorithms
    Jam Jahanzeb Khan Behan, Sajjad Haider
    CellCarta, Antwerp, Belgium; Faculty of Computer Science, Institute of
    Business Administration, Karachi, Pakistan

O. Toward CORDIC-based Hyperbolic Function Implementation for Neural Engineering
    Hardware
    Ardavan Vakil, Miad Faezipour
    School of Engineering Technology, Electrical & Computer Engineering Technology,
    Purdue University, West Lafayette, Indiana, USA

O. Towards Practical Onboard PHM System for Aircraft Engines
    Jian Cao, Jinyi Xu, Jiaqi Huang, Weidong Yang
    School of Computer Science, Fudan University, Shanghai, China;
    COMAC Shanghai Aircraft Design and Research Institute, Shanghai, China;
    Zhuhai Fudan Innovation Institute, School of Computer Science,
    Fudan University, Shanghai, China

RESEARCH TRACK ON COMPUTATIONAL SCIENCE (CSCI-RTCS)
https://american-cse.org/csci2022/RTCS
==

O. Web-based 3D Smog Visualization for Air Pollution Analysis
    Jordan Limperis, Felix Hamza-Lup, Weitian Tong
    Department of Computer Science, Georgia Southern University,
    Statesboro, Georgia, USA

O. Finite Difference Methods with Improved Properties and their Application
    to Solving Some Model Problems
    V. R. Ibrahimov, M. N. Imanova
    Institute of Control System: A. Huseynov, Baku, Azerbaijan;
    Computational Mathematics, Baku State University, Baku, Azerbaijan;
    Science Development Foundation under the President of the Republic of
    Azerbaijan, Baku, Azerbaijan

O. The 2-MAXSAT Problem Can Be Solved in Polynomial Time
    Yangjun Chen
    Department of Applied Computer Science, The University of Winnipeg,
    Winnipeg, MB, Canada

O. Refining a Parameter Setting Evolutionary Approach for Fire Spreading Models
    Based on Cellular Automata
    Maria Eugenia A. Ferreira, Danielli A. Lima, Luiz G. A. Martins,
    Gina M. B. Oliveira
    Federal University of Uberlandia (UFU), Campus Santa Monica, Computer
    Faculty (FACOM), Uberlandia, MG, Brazil; Federal Institute of Triangulo
    Mineiro (IFTM), Campus Patrocinio, Information Technology Department (DTI),
    Laboratory of Intelligence Computational and Robotics (LICRo),
    Patrocinio, MG, Brazil

O. Incentives Effect on the Size of Mining Pool for Power-of-Work Blockchain
    Systems
    Yean-Fu Wen, Chun-Yu Huang
    Graduate Institute of Information Management, National Taipei University,
    Taiwan (R.O.C)

O. A Review of Counterfeit Product Identification Models
    Selallo M. Rahlagane, Topside E. Mathonsi, Tshimangadzo M. Tshilongamulenzhe
    Tshwane University of Technology, Pretoria, South Africa

O. Intelligent Computational Approach to Constructing Adequate Statistical
    Decisions under Parametric Uncertainty of Applied Stochastic Models
    Nicholas A. Nechval, Gundars Berzins, Konstantin N. Nechval
    BVEF Research Institute, University of Latvia, Riga, Latvia;
    Aviation Department, Transport and Telecommunication Institute Riga, Latvia

O. Entry and Exit Decision Under Uncertainty Where Prices Include Jump
    Diffusion Processes
    Kangrong Tan, Shozo Tokinaga
    Faculty of Economics, Kurume University, Japan;
    Department of Economics, Kyushu University, Japan

O. Effectiveness of PMV-based Controls for Commercial Buildings in the USA
    Maya Arida, Ahmed Megri, Rand Talib
    North Carolina A&T State University, Greensboro, North Carolina, USA;
    University of Cincinnati, Cincinnati, Ohio, USA

O. Automatic Plant Disease Detection Using Deep Learning
    Saeka Rahman, Sudip Vhaduri, Miad Faezipour
    School of Engineering Technology, Electrical and Computer Engineering
    Technology, Purdue University, West Lafayette, Indiana, USA;
    Department of Computer & IT, Purdue University, West Lafayette, Indiana, USA

RESEARCH TRACK ON COMPUTATIONAL BIOLOGY (CSCI-RTCB)
https://american-cse.org/csci2022/RTCB
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O. Collagen a1(XI) Structure Prediction by Alphafold 2
    Abu Sayeed Chowdhury, Julia Thom Oxford
    Biomolecular Sciences Graduate Program, Center of Biomedical Research
    Excellence, Boise State University, Boise, Idaho, USA;
    Department of Biological Sciences, Center of Biomedical Research Excellence,
    Boise State University, Boise, Idaho, USA

O. An Overview of Machine Learning in Biology
    Abigayle Hoppe, Ehyo Marie Degny, Callie Siverson, Frank Djarnie, Mohammed Mahmoud
    Department of Computer Science & Information Systems,
    Minnesota State University, Moorhead, Minnesota, USA;
    Department of Computer Science, Bemidji State University, Bemidji, Minnesota, USA

RESEARCH TRACK ON BIG DATA AND DATA SCIENCE (CSCI-RTBD)
https://american-cse.org/csci2022/RTBD
==

O. Sparrow Tracer: Scalable Real Time Metrics from Event Log Pipelines at Twitter
    Riya Chakraborty, Lohit Vijayarenu, Zhenzhao Wang, Praveen Killamsett
    Twitter Inc, USA;   Columbia University, USA

O. CDAP: A Cultural Algorithm for Data Placement in Big Data Workflows
    Mahdi Ebrahimi, Seyed Ziae Mousavi Mojab, Najmeh Najmi
    Department of Computer Science, California State University, Northridge,
    Los Angeles, California, USA; College of Business & IT, Lawrence Tech.
    University, Southfield, Michigan, USA

O. An Agri-Food Data Platform for Food Safety and Certification
    Nikos Papageorgopoulos, Danai Vergeti, Elena Politi, Dimitris Ntalaperas,
    Xanthi S. Papageorgiou, Manos Karvounis, Giannis Stoitsis, Braminir Rakic,
    Milos Kotlar, Simeon Petrov, Antoniy Kunchev
    Robotics & Cognitive Systems Unit, UBITECH Athens, Greece;
    AGRROKNOW Athens, Greece; PROSPEH Belgrade, Serbia; SIRMA AI Sofia, Bulgaria

O. SPECTS: Price Elasticity Computation Model using Thompson Sampling
    Srividhya Sethuraman, Uma Maheswari G, Sharadha Ramanan
    TCS Research and Innovation Labs, Tata Consultancy Services Ltd, Chennai, India

O. A Recurrent Neural Network for Prediction of the Economic and Financial
    Indicators in Context of COVID-19 Pandemic
    Ray R. Hashemi, Omid M. Ardakani, Jeffrey A. Young, Azita G. Bahrami
    Department of Computer Science, Georgia Southern University, Armstrong Campus,
    Savannah, Georgia, USA; Department of Economics, Georgia Southern University,
    Armstrong Campus, Savannah, Georgia, USA; Department of Computer science,
    Clemson University, Clemson, South Carolina, USA;
    IT Consultation, Savannah, Georgia, USA

O. Leveraging K-hop based Graph for the Staffing Recommender System with
    Parametric Geolocation
    Yan Wang, Amar Henni, Azade Fotouhi, Leopold Mvondo Ze
    Sogeti Innovation Labs, Capgemini, Meudon, France

O. A Study on the Performance Comparison of Five Popular Machine Learning Models
    Applied for Loan Risk Prediction
    Ihsan Said, Yanzhen Qu
    School of Computer Science, Colorado Technical University, Colorado Springs,
    Colorado, USA

O. Creating a Dataset used for Applying Machine Learning Technique to Accurately
    Forecast the Energy Cost in Home-Based Small Businesses
    Edwin Arrey Agbor, Yanzhen Qu
    Colorado Technical University, Colorado Springs, Colorado, USA

O. Moving RDBMS to NoSQL Paradigms
    Hiwa Ali Faraj
    Information Technology, University of Sulaimani, Sulaymaniyah, Iraq

O. Hey There, You Are Behaving Like a Troll: Using K-Means Algorithm to Cluster Trolling Traits
    Sariah Lopez-Fierro, Carlos Chiriboga-Calderon, Jose Lopez-Fierro, Ruben Pacheco-Villamar
    Departamento de Tecnologia, Soluciones Wandarina S. A.,
    Guayaquil, Ecuador;
    Universidad E-Espiritu Santo, Guayaquil, Ecuador

O. Statistical Relationship between Internet Data Indicators and the Brazilian
    Stock Exchange
    Kethlyn Campos Silva, Lucas Jose de Faria, Deborah Silva Alves Fernandes,
    Marcio Giovane Cunha Fernandes, Afonso Ueslei Fonseca,
    Fabrizzio Soares Alves de Melo Nunes Soares
    EMC, Universidade Federal de Goias, Goiania, Brazil; Informatica, Instituto
    Federal Goiania, Goiania, Brazil; INF, Universidade Federal de Goias,
    Goiania, Brazil; CCET, Universidade Estadual de Goias, Goiania, Brazil

O. Proposal of a Multi-purpose Marketing Data Analysis Program Design Methodology
    Donggyu Choi, Jongwook Jang
    Institute of Smart IT, Dong-eui University, Busan, Republic of Korea;
    Department of CE, Dong-eui University, Busan, Republic of Korea

O. Application of an Oversampling Method for Improving Road Surface Classification
    Addisson Salazar, Luis Manuel Pereira, Luis Vergara
    Institute of Telecommunications and Multimedia Applications,
    Universitat Politecnica de Valencia, Valencia, Spain

RESEARCH TRACK ON SOCIAL NETWORK ANALYSIS, SOCIAL MEDIA, & MINING (CSCI-RTNA)
https://american-cse.org/csci2022/RTNA
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O.   Social Network Analysis of Biomedical Research Growth at a Primarily
     Undergraduate Institution
     Amrina Ferdous, Diane Smith, Tracy Yarnell, Julia Thom Oxford
     Center of Biomedical Research Excellence, Boise State University,
     Boise, Idaho, USA; Computing Program, Center of Biomedical Research
     Excellence, Boise State University, Boise, Idaho, USA

O.   PSR: Probabilistic Serendipitous Recommendations
     Hyeseong Park, Kyung Whan Oh, Uran Oh
     Department of Computer Engineering, Sogang University, Seoul, South Korea;
     Department of Computer Engineering, Ewha Womans University, Seoul, South Korea

O.   A Study on Public Sentiment of Comments from COVID-19-related Videos
     Hualong Yu, Chao Xu, Guang Yu
     School of Management, Harbin Institute of Technology, Harbin, China

O.   A Study on Personal Identifiable Information Exposure on the Internet
     Ningning Wu, Robinson Tamilselvan, Talha Tayyab
     Department of Information Science, University of Arkansas at Little Rock,
     Little Rock, Arkansas, USA

O.   Predicting the Trends of Stock Price by CNN-BiLSTM-AM and Fuzzy Twin Support
     Vector Machine from Social Networks
     Pei-Yi Hao
     Department of Intelligent Commerce, National Kaohsiung University of Science
     and Technology, Kaohsiung, Taiwan, ROC

RESEARCH TRACK ON CYBER WARFARE, CYBER DEFENSE, & CYBER SECURITY (CSCI-RTCW)
https://american-cse.org/csci2022/RTCW
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O. FDIA Detection Methods on a Navy Smart Grid AMI Data Set using Autoencoder
    Neural Networks: A Case Study
    Preston Musgrave, Preetha Thulasiraman
    Naval Postgraduate School, Monterey, California, USA

O. Enhancing Security in Communications between Unmanned Aerial Vehicles (UAVs)
    Ilias Panagiotopoulos, George Dimitrakopoulos, Elena Politi
    Department of Telematics and Informatics, Harokopio University of Athens,
    Athens, Greece

O. Data Behind the Walls - An Advanced Architecture for Data Privacy Management
    Amen Faridoon, M. Tahar Kechadi
    School of Computer Science, University College Dublin, Dublin, Ireland;
    Insight SFI Research Centre for Data Analytics, Ireland

O. Implementation of an Enhanced Security Algorithm for Detecting Distributed
    Denial of Services Attacks in Cloud Computing
    Coster Baloyi, Topside E. Mathonsi, Deon P. Du Plessis,
    Tshimangazdo M. Tshilongamulenzhe
    Tshwane University of Technology, South Africa

O. Comparative Analysis of LSTM and CNN for Efficient Malware Detection
    Frances Osamor
    Computer Science and Information Technology, University of the District of
    Columbia, Washington, DC, USA

O. Roles of Information Security and Benefits in Forming User Satisfaction
    of Metaverse
    Hyeon Jo, Sangsun Park
    Department of Planning, Realsecu, Busan, South Korea;
    Division of Business Administration, Sungkonghoe University, Seoul, South Korea

O. The Need for Proactive Digital Forensics in Addressing Critical Infrastructure
    Cyber Attacks
    April Tanner, Frances C. Dancer, Janne Hall, Naukee Parker,
    Russell Bishop, Tony McBride
    Department of Electrical & Computer Engineering and Computer Science,
    Jackson State University, Jackson, Mississippi, USA; Division of Information
    Technology, Jackson State University, Jackson, Mississippi, USA

O. A Design Approach for Minimizing Data Theft
    George O. M. Yee
    Computer Research Lab, Aptusinnova Inc., Ottawa, Canada;
    Department of Systems and Computer Engineering, Carleton University,
    Ottawa, Canada

O. Gender Differences in Perceptions of Information Security, Usefulness, and
    Enjoyment Towards Metaverse
    Hyeon Jo, Sangsun Park
    Department of Planning, Realsecu, Busan, South Korea;
    Division of Business Administration, Sungkonghoe University, Seoul, South Korea

O. Qualitatively Evaluating a Four-Phase Process for Managing Solution of the
    United States' Biometric Identity Repository
    James Merrill, Yanzhen Qu
    School of Computer Science, Colorado Technical University, Colorado Springs,
    Colorado, USA

O.   Development of Threat Hunting Model Using Machine Learning Algorithms for Cyber Attacks Mitigation
J. E. T. Akinsola, E. A. Olajubu, G. A. Aderounmu
Department of Computer Sciences, First Technical University, Ibadan, Nigeria;
Department of Computer Science and Engineering, Obafemi Awolowo University, Ile-Ife, Nigeria

O.   Implementation of an Enhanced Cybersecurity Algorithm for Smart Grid
Kholofelo Hope Halefose, Topside E. Mathonsi, Tonderai Muchenje, Deon P. Du Plessis
Department of Information Technology, Tshwane University of Technology, Pretoria, South Africa

O.   Detection of Malicious Activities Using Machine Learning in Physical Environments
Tzu-Yen Hsu, Cheng-Yuan Tang
Department of Mechatronic Engineering, Huafan University, New Taipei, Taiwan;
Department of Information Management, Huafan University, New Taipei, Taiwan

O.   Machine Learning for Detecting Phishing on Websites
Kagiso Matlaila, Tonderai Muchenje, Topside Ehleketani Mathonsi, Vusimuzi Malele
Department of Information Technology, Tshwane University of Technology, South Africa

O.   Data Approach to Biometrics in Cybersecurity with Related Risks
Angelo Arteche, Cody Asher, Caroline Bull, Henry Dare, Isha Datey, Erich Elshoff, Mohammed Mahmoud
Department of Computer Science and Engineering, Oakland University, Rochester, Michigan, USA;
Department of Computer Science, Bemidji State University, Bemidji, Minnesota, USA

RESEARCH TRACK ON MOBILE COMPUTING, WIRELESS NETWORKS, & SECURITY (CSCI-RTMC)
https://american-cse.org/csci2022/RTMC
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O. Modeling the Resource Allocation in 5G Radio Access Networks with
    Network Slicing
    Daniel Haro-Mendoza, Luis Tello-Oquendo, Vicent Pla, Jorge Martinez-Bauset,
    Luis A. Marrone, Shih-Chun Lin
    College of Engineering, Universidad Nacional de Chimborazo, Ecuador;
    LINTI, Universidad Nacional de La Plata, Argentina;
    iWN Lab, Department of Electrical and Computer Engineering, North Carolina
    State University, USA;
    Communications Department, Universitat Politecnica de Valencia, Spain

O. On the Resource Allocation for Radio Access Network Slicing in Cellular IoT
    with Massive Traffic
    Daniel Haro-Mendoza, Luis Tello Oquendo, Vicent Pla, Jorge Martinez-Bauset,
    Luis A. Marrone, Shih-Chun Lin
    College of Engineering, Universidad Nacional de Chimborazo, Ecuador;
    LINTI, Universidad Nacional de La Plata, Argentina; iWN Lab, Department of
    Electrical and Computer Engineering, North Carolina State University, USA;
    Communications Department, Universitat Politecnica de Valencia, Spain

O. A Comparison of Power Allocation Mechanisms for 5G D2D Mobile
    Communication Networks
    Dimitris Georgiadis, Elena Politi, George Dimitrakopoulos
    Department of Informatics and Telematics, Harokopio University, Athens, Greece

O. Optimizing the Transmission of Multimedia Content over Vehicular Networks
    Pablo Garrido, Pablo Pinol, Miguel Martinez-Rach, Otoniel Lopez,
    Hector Migallon, Manuel P. Malumbres
    Universidad Miguel Hernandez, Elche, Spain

O. GRASSMARLIN-based Metadata Extraction of Cyber-Physical Systems Intrusion
    Detection in CyberSCADA Networks
    John E. Efiong, Bodunde O. Akinyemi, Emmanuel A. Olajubu, Ganiu A. Aderounmu
    Department of Computer Science & Engineering, Obafemi Awolowo University,
    Ile-Ife, Nigeria

O. Hybrid Modulation Scheme for System Performance Evaluation and Energy
    Efficiency Measurement in 5G Technology
    Bertille Auyane Ngouessy ep Ovono, Temitayo Otunniyi, Marcel Ohanga Odhiambo
    Vaal University of Technology, South Africa;
    Mangosuthu University of Technology, South Africa

O. Performance Optimization of Concurrent VOIP Calls Across Wireless Mesh Networks
    Olusola Olorunnisola, Topside E. Mathonsi, Deon P. Du Plessis
    Department of Information Technology, Tshwane University of Technology,
    Pretoria, South Africa

O. Improved Encryption Algorithm for Public Wireless Network
    Christopher Khosa, Topside E. Mathonsi, Deon P. du Plessis,
    Tshimangazdo M. Tshilongamulenzhe
    Department of Information Technology, Tshwane University of Technology,
    Pretoria, South Africa

O. Locating and Extracting Digital Evidence from Mobile: Malware Context
    Abdullah Mujawib Alashjaee
    Department of computer science, Faculty of Computing and Information
    Technology, Northern Border University, Arar, Saudi Arabia

O. A Survey of Intelligent Traffic Control Algorithm in Wireless Sensor Networks
    Tshimangadzo M. Tshilongamulenzhe, Topside E. Mathonsi, DP DuPlessis
    Department of Information Technology, Tshwane University of Technology,
    Pretoria, South Africa

O. Cost-Effective Telecommunication Technologies for Rural Areas in Developing
    Countries like South Africa
    Marcel Ohanga Odhiambo, Weston Mwashita
    Mangosuthu University of Technology, Durban, South Africa;
    International University of Management, Windhoek, Namibia

O. Implementation of a Model to Amplify Transmission Quality of Satellite Television
    Lebohang Maja, Topside E. Mathonsi, Deon P. du Plessis,
    Tshimangazdo M. Tshilongamulenzhe
    Department of Information Technology, Tshwane University of Technology,
    Pretoria, South Africa

O. Crowd-Funded Earthquake Early-Warning System
    Hudson Kaleb Dy, Hsi-Jen James Yeh
    Department of Engineering and Computer Science, Azusa Pacific University,
    Azusa, California, USA; Walnut High School, Walnut, California, USA

O. Vehicle Ad Hoc Network System for Intelligent Transport Systems: A Review
    Ndzalama Ngobeni, Topside E. Mathonsi, Tonderai Muchenje, Vusumuzi Malele
    Tshwane University of Technology, Pretoria, South Africa

O. A Review of Authentication Algorithms for Mobile Ad Hoc Networks
    Thandiwe W. Mahlalela, Topside E. Mathonsi, Tonderai Muchenje, Vusumuzi Malele
    Tshwane University of Technology, Pretoria, South Africa

RESEARCH TRACK ON INTERNET OF THINGS & INTERNET OF EVERYTHING (CSCI-RTOT)
https://american-cse.org/csci2022/RTOT
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O. RSSI and Machine Learning-Based Positioning System with Sub-Meter Accuracy
    Hanyuan Huan, Varick L. Erickson
    Department of Computer Science, California State University, East Bay,
    California, USA

O. Implementation of a Multisensors Fire-Fighting Monitoring System for
    Forest Protection
    Giovanni Pettorru, Marco Bertolusso, Michele Spanu, Matteo Anedda,
    Daniele Giusto
    DIEE Department of Electrical and Electronic Engineering,
    University of Cagliari - UdR CNIT Cagliari, Italy

O. Review Paper to Enhance Authentication of IoT Devices in Industrial
    Control Systems
    Jahid Hasan Miah, Tonderai Muchenje, Topside Ehleketani Mathonsi,
    Vusimuzi Malele
    Department of Information Technology, Tshwane University of Technology,
    South Africa

O. Smart Prediction System for Classifying Mirai and Gafgyt Attacks on
    IoT Devices
    Sapiah Sakri, Rawan Aldawod, Noura Alsaleh, Nojod Aldalbahi, Reema Alqahtani
    College of Computer & Information Science, Princess Nourah bint
    Abdulrahman University, Riyadh, Saudi Arabia

O. Security Model over Mobile Internet of Things in Wireless Networks: A Review
    Topside E. Mathonsi, Tshimangadzo M. Tshilongamulenzhe
    Department of Information Technology, Tshwane University of Technology,
    Pretoria, South Africa

RESEARCH TRACK ON SMART CITIES AND SMART MOBILITY (CSCI-RTSC)
https://american-cse.org/csci2022/RTSC
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O. Study on Q-Learning and Deep Q-Learning in Urban Roadside Parking Space Search
    Hung-Chin Jang, Chun-Yee Lee
    Department of Computer Science, National Chengchi University, Taipei,
    Taiwan, R.O.C.

O. Development and Implementation of a Communication Network in a Formula SAE Car
    Guilherme P. de Lima, Luiz Carlos G. Sacramento Junior,
    Cristiano de S. de Carvalho, Paulo Roberto F. Junior, Luis B. de Assis Junior,
    Fabricio L. e Silva, Diego N. Brandao
    CEFET-RJ, Nova Iguacu, Brazil; NUPEM/CEFET-RJ, Nova Iguacu, Brazil;
    CEFET-RJ, Rio de Janeiro, Brazil; PPCIC/CEFET-RJ, Rio de Janeiro, Brazil

O. Methods and Tools for Monitoring Driver's Behavior
    Muhammad Tanveer Jan, Sonia Moshfeghi, Joshua Conniff, Jinwoo Jang,
    Kwangsoo Yang, Jianna Zhai, David Newman, Ruth Tappenm, Borko Furht
    College of Engineering and Computer Science, Florida Atlantic University,
    Boca Raton, Florida, USA; Christine E. Lynn College of Nursing,
    Florida Atlantic University, Boca Raton, Florida, USA

O. An Empirical Investigation on Linking Ethics with the Acceptance of
    Autonomous Vehicles
    Konstantina Karathanasopoulou, Ilias Panagiotopoulos, George Dimitrakopoulos,
    Konstantina Marra
    Department of Telematics & Informatics, Harokopio University of Athens, Greece

O. A Contrastive Learning based CNN-GRU Model for Time Series and Its
    Application for Water Quality Prediction
    Yahong Lian, Jing Yun, Yuncheng Wang, Zhiwei Xu
    College of Data Science and Application, Inner Mongolia University of
    Technology, Hohhot, P. R. China

O. GIS Applications in Air Pollution Modeling
    Daniel Isakovic, Josh Jordan, Connor Bowyer, Isabella Jamil,
    Elias Qamar, Mohammed Mahmoud
    Department of Computer Science and Engineering, Oakland University,
    Rochester, Michigan, USA;
    Department of Computer Science, Bemidji State University,
    Bemidji, Minnesota, USA

RESEARCH TRACK ON CLOUD COMPUTING AND DATA CENTERS (CSCI-RTCC)
https://american-cse.org/csci2022/RTCC
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O. Evaluation of Security Issues in Cloud-Based File Sharing Technologies
    Sikhumbuzo Ngwenya, Munienge Mbodila, Omobayo A. Esan, Femi Elegbeleye
    Department of Information Technology Systems,
    Walter Sisulu University, Eastern Cape, South Africa

O. Performance Assessment for Scheduling Algorithms in Cloud Computing
    Mimouna Alkhonaini
    Department of Computer Science, Prince Sultan University, Riyadh,
    Saudi Arabia

O. A Review of Security Models to Detect and Prevent Advanced Persistent
    Threats over Cloud Computing
    Lawrence Mashimbye, Topside E. Mathonsi, Vusumuzi Malele
    Tshwane University of Technology, Pretoria, South Africa

RESEARCH TRACK ON PARALLEL & DISTRIBUTED COMPUTING (CSCI-RTPD)
https://american-cse.org/csci2022/RTPD
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O. An Approach to Parallelization of Respiratory Disease Spread Simulations
    in Emergency Rooms
    Martin Paradiso, Lucas Maccallini, Agustina Vericat, Fernando Romero,
    Diego Encinas
    Informatics Research Institute LIDI. Universidad Nacional de La Plata,
    Argentina; SISDIC, Hospital San Roque de Gonnet (MSPBA), La Plata,
    Argentina; SimHPC-TICAPPS, Universidad Nacional Arturo Jauretche,
    Florencio Varela, Argentina

RESEARCH TRACK ON SIGNAL & IMAGE PROCESSING, COMPUTER VISION & PATTERN RECOGNITION (CSCI-RTPC)
https://american-cse.org/csci2022/RTPC
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O. Spatial Resolution Enhancement for Halftone Images using Convolutional
    Neural Networks
    Guilherme Apolinario Silva Novaes, Hae Yong Kim
    Dept. Eng. Sistemas Electronicos, Escola Politecnica,
    Universidade de Sao Paulo, Sao Paulo, Brazil

O. Foreign Object Debris Detection for Airport Pavement Images based on
    Self-supervised Localization and Vision Transformer
    Travis Munyer, Daniel Brinkman, Xin Zhong, Chenyu Huang, Iason Konstantzos
    Department of Computer Science, University of Nebraska Omaha, Nebraska, USA;
    Aviation Institute, University of Nebraska Omaha, Nebraska, USA;
    Durham School of Architectural Engineering and Construction,
    University of Nebraska Lincoln, Nebraska, USA

O. Perspective Transformation Layer
    Nishan Khatri, Agnibh Dasgupta, Yucong Shen, Xin Zhong, Frank Y. Shih
    Department of Computer Science, University of Nebraska Omaha, Nebraska, USA;
    Department of Computer Science, New Jersey Institute of Technology,
    Newark, New Jersey, USA

O. Interpretable Generative Modeling using a Hierarchical Topological VAE
    Etienne Desticourt, Veronique Letort, Florence d'Alche-Buc
    Centre d'Excellence Systeme, ALMS, Air Liquide, Antony, France;
    MICS, CentraleSupelec, Universite Paris-Saclay, Gif-sur-Yvette, France;
    LTCI, Telecom Paris, IP Paris, Palaiseau, France

O. Attentional Convolutional Neural Network for Automating Pathological Lung
    Auscultations Using Respiratory Sounds
    Md. Motiur Rahman, Shiva Shokouhmand, Miad Faezipour, Smriti Bhatt
    School of Engineering Technology, Electrical & Computer Engineering Technology,
    Purdue University, West Lafayette, Indiana, USA;
    Department of Computer and Information Technology, Purdue University,
    West Lafayette, Indiana, USA

O. HPGER: Integrating Human Perception into Group Emotion Recognition
    Abolfazl Farahani, Navid Hashemi Tonekaboni, Khaled Rasheed, Hamid R. Arabnia
    School of Computing, University of Georgia, Athens, Georgia, USA;
    Department of Computer Science, College of Charleston,
    Charleston, South Carolina, USA

O. Weed Recognition in Sesame Field Using Computer Vision Algorithms
    Uchechukwu Ngozi Nwachukwu, Cristian Rodriguez Rivero
    Cardiff School of Technology Cardiff Metropolitan University,
    Wales, United Kingdom (UK)

O. Segmentation of Skin Cancer and Intensity Classification Using DCNN
    Hanan Aljuaid, Rafaf Alnoghaimshi, Arwa Alhammad, Fay Aldhafer, Noura Alsakran
    Department of Computer Sciences, College of Computer and Information Sciences,
    Princess Nourah bint Abdulrahman University (PNU), Riyadh, Saudi Arabia

O. Lung Cancer Prediction System using CNN, ANN, and Naive Bayes
    Hanan Aljuaid, Raida Alotaibi, Hialh Almatrafi, May Aldhobaie,
    Najla Alsowayed, Tina Alshalan, Leen Alfuraih
    Computer Sciences Department, Princess Norah bint Abdullrahman University,
    Riyadh, Saudi Arabia

O. Mean Maximum Raw Thresholding Algorithm for Detecting Suspected Regions of
    Interest of Tumors in Breast Magnetic Resonance Imaging
    Ali Al-Faris
    Computer Science Department, Worcester State University, Worcester,
    Massachusetts, USA

O. UNet++ with Attention Mechanism for Hippocampus Segmentation
    Xueting Cui, Thony Yan Liang, Marymossadat Aghili, Micheal Adeyosoye,
    Rosie E. Curiel Cid, David Lowenstein, Ranjan Duara, Malek Adjouadi
    Electrical and Computer Engineering, Florida International University,
    Miami, Florida, USA;
    Microsoft, San Francisco Bay Area, California, USA;
    Department of Neuropsychology, University of Miami, Miami, Florida, USA;
    Center for Cognitive Neuroscience and Aging, University of Miami, Miami,
    Florida, USA; Wien Center for Alzheimer's Disease and Memory Disorders,
    Mt Sinai Medical Center, Miami, Florida, USA

O. On the Design and Development of a Smart Safety Warning System for Slow
    Moving Vehicles
    Hongjun Su
    Department of Electrical & Computer Engineering, Georgia Southern University,
    Savannah, Georgia, USA

O. Citizen Science Mobile Apps with Machine Learning for Recyclable Objects
    Chelsea Yeh, Fahim Hasan Khan
    Walnut High School, Walnut, California, USA; Department of Computer Science
    and Engineering, University of California Santa Cruz, California, USA

O. The Practical Use of GIS in Agriculture
    Aaron Butora, Brent Soloniewicz, Cameron Schwartz, Christian Aziz,
    Sichang Su, Mohammed Mahmoud
    Department of Computer Science and Engineering, Oakland University,
    Rochester, Michigan, USA;
    Department of Computer Science, Bemidji State University,
    Bemidji, Minnesota, USA

O. Automatic Arrhythmia Detection Using Deep Learning
    Saeka Rahman, Miad Faezipour
    School of Engineering Technology, Electrical and Computer Engineering
    Technology, Purdue University, West Lafayette, Indiana, USA

O. Synthesizing a Reference Image from the Macro Images of a Painting for
    Vignetting Correction
    Soonchul Jung, Jae Woo Kim, Yoon-Seok Choi, Hyeong-Ju Jeon, Jin-Seo Kim
    Content Research Division, Electronics and Telecommunications Research
    Institute, Republic of Korea

O. The Applications of GIS in Water Resources
    Kirollos Girgis, Nikki Clouse, Olyana Mushe, Parker Morgan,
    Terrell Brooks, Mohammed Mahmoud
    Department of Computer Science and Engineering, Oakland University,
    Rochester, Michigan, USA;
    Department of Computer Science, Bemidji State University,
    Bemidji, Minnesota, USA

RESEARCH TRACK ON HEALTH INFORMATICS AND MEDICAL SYSTEMS (CSCI-RTHI)
https://american-cse.org/csci2022/RTHI
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O. Diagnosis of Pediatrics Epilepsy Based on Graph Analysis of Scalp EEG Applying
    Mutual Information
    Elaheh Zarafshan, Parisa Forouzannezhad, Hoda Rajaei, Ulyana Williams,
    Mercedes Cabrerizo, Ilker Yaylali, Alberto Pinzon, Malek Adjouadi
    Center for Advanced Technology and Education, Department of Electrical and
    Computer Engineering, Florida International University (FIU), Florida, USA;
    Department of Radiation Oncology, School of Medicine, University of
    Washington, Seattle, Washington, USA; Massachusetts Institute of Technology,
    Massachusetts, USA; Oregon Health & Science University, Portland, Oregon, USA;
    Department of Neurology, Neuroscience Center, Baptist Hospital of Miami,
    Florida, USA

O. A Bioengineering System for Assessing Children's Cognitive Development by
    Computerized Evaluation of Shared Intentionality
    Igor Val Danilov
    Academic Center for Coherent Intelligence, Riga, Latvia

O. A Topological Characterization of DNA Sequences based on Chaos Geometry and
    Persistent Homology
    Dong Quan Ngoc Nguyen, Phuong Dong Tan Le, Lin Xing, Lizhen Lin
    Yanqi Lake Beijing Institute of Mathematical Sciences and Applications,
    Yanqi Island, Huairou District, Beijing, P. R. China; Department of
    Applied Mathematics, University of Waterloo, Waterloo, Canada;
    Department of Applied and Computational Mathematics and Statistics,
    University of Notre Dame, Notre Dame, Indiana, USA

O. On Creating a Comprehensive Food Database
    Lexington Whalen, Brie Turner-McGrievy, Matthew McGrievy, Andrew Hester,
    Homayoun Valafar
    College of Computing and Engineering, University of South Carolina, Columbia,
    South Carolina, USA; Arnold School of Public Health, University of
    South Carolina, Columbia, South Carolina, USA

O. Comparison of Dimensionality Reduction Methods for Multimodal Classification
    of Early Stages of Alzheimer's Disease
    Luana Okino Sawada, Ulyana Morar, Robin Perry Mayrand, Christian Yaphet Freytes,
    Micheal Adeyosoye, Mercedes Cabrerizo, Rosie E. Curiel Cid, David Loewenstein,
    Ranjan Duara, Malek Adjouadi
    Knight Foundation School of Computing and Information Sciences,
    Florida International University, Miami, Florida, USA; Electrical and
    Computer Engineering, Florida International University, Miami, Florida, USA;
    Center for Cognitive Neuroscience and Aging, University of Miami Miller
    School of Medicine, Miami, Florida, USA; Wien Center for Alzheimer's Disease
    and Memory Disorders, Mount Sinai Medical Center, Miami, Florida, USA

O. Construction of Disease-pathological Feature Knowledge Graph Based on Entity
    Recognition and Relation Extraction
    Jun Li, Honghai Feng, Pengcheng Zhou, Ruihui Hou, Yaju Wei, Yanyan Chen
    Henan University, Kaifeng, P. R. China

O. Applying Systems Engineering and Decision Analysis to Healthcare: a Perinatal Operations Center
    John Celona, Louis Halamek
    Decision Analysis Associates, LLC, San Carlos, California, USA;
    Division of Neonatal & Developmental Medicine, Department of Pediatrics,
    Stanford University, Stanford, California, USA

O. Automatic Tuberculosis Detection using Binary Pattern of Phase Congruency
    Afonso Ueslei da Fonseca, Juliana Paula Felix, Gabriel da Silva Vieira,
    Deborah Fernandes, Fabrizzio Soares
    Universidade Federal de Goias, Goiania - GO, Brazil;
    Instituto Federal Goiano, Campus Ceres, Ceres - GO, Brazil

O. Blockchain-Based Internet of Medical Things (IoMT) for Healthcare Management
    Hamed Taherdoost
    Department of Arts, Communications and Social Sciences,
    University Canada West, Vancouver, Canada

O. M-Health System Framework for Diagnosing Inflammatory Breast Cancer with
    Fuzzy Logic
    Buket D. Barkana, Ahmed El-Sayed, Mark Pitcher, Ruba Deeb, Ruth Pfeiffer,
    Marilyn Roubidoux, Rana H. Khaled, Maha Helal, Hussein Khaled,
    Catherine Schairer, Amr Soliman
    Electrical Engineering Department, University of Bridgeport, Bridgeport,
    Connecticut, USA; Biostatistics Branch, National Cancer Institute,
    The National Institutes of Health (NIH), Bethesda, Maryland, USA;
    Department of Radiology, University of Michigan, Ann Arbor, Michigan, USA;
    National Institute of Cancer, Cairo University, Cairo, Egypt;
    City University of New York, Medical School, New York, USA

O. The Research Activities and Development Trends of Antineoplastics Targeting
    PD-1/PD-L1 based on Scientometrics and Patentometrics
    Ting Zhang, Juan Chen, Yan Lu, Dongzi Xu, Xiaoyi Yang, Zhaolian Ouyang
    Institute of Medical Information, Chinese Academy of Medical Sciences and
    Peking Union Medical College, Beijing, P. R. China

O. College Spread of COVID-19 in Ohio
    Akinkunle Akinola, Akoh Atadoga, Kimberlyn Brooks, Vibhuti Chandna,
    Robert C. Green II
    Data Science Program, Bowling Green State University, Bowling Green, Ohio, USA;
    Department of Computer Science, Bowling Green State University,
    Bowling Green, Ohio, USA

O. An Intelligent Zigbee Algorithm for Healthcare Monitoring System using
    Wireless Sensor Networks
    Nthabiseng Pertunia Mosana, Tonderai Muchenje, Topside Ehleketani Mathonsi,
    Vusimuzi Malele
    Department of information Technology, Tshwane University of Technology,
    South Africa

O. Medication Nonadherence in TB Patients: Innovative Technology Use and
    Related Legal Framework
    Oluwaseun Adetunji, Olayinka Adeniyi, Adele Botha, Marlien Herselman
    School of Computing, University of South Africa, Johannesburg, South Africa;
    Centre for Intellectual Property and Information Technology,
    Strathmore University, Nairobi, Kenya; CSIR, School of Computing,
    University of South Africa, Pretoria, South Africa

O. Towards a SaaS Application Providing an Ethical Support for Human
    Caregiving of People Living at Home
    Pierre Bouchet, Sophie Jacquot, Christian Toinard
    Laboratoire d'informatique fondamentale d'orleans (LIFO), France;
    Institut Denis Poisson (IDP), France

O. Graph OLAP-based Influence Analytics for Complex Gene and Disease
    Influence Network
    Mira Kim
    IBM Automation, International Business Machines Corporation Costa Mesa (IBM),
    California, USA

O.   Computational Analysis of a Light-Weight SUVr Processing Technique for
     Neuroimaging Alzheimer's Disease
     Robin Perry Mayrand, Christian Yaphet Freytes, Luana Okino Sawada,
     Micheal Adeyosoye, Rosie E. Curiel Cid, David Lowenstein, Ranjan Duara,
     Malek Adjouadi
     Electrical and Computer Engineering, Florida International University,
     Miami, Florida, USA; Department of Neuropsychology, University of Miami,
     Miami, Florida, USA; Wien Center for Alzheimer's Disease and Memory
     Disorders, Mt Sinai Medical Center, Miami, Florida, USA; School of
     Computing & Information Sciences, Florida International University,
     Miami, Florida, USA; Cognitive Neurosciences and Aging, University
     of Miami, Miami, Florida, USA

O.   Inflammation Assessment of Burn Wound with Deep Learning
     Saeka Rahman, Miad Faezipour, Guilherme Aramizo Ribeiro, Elika Ridelman,
     Justin D. Klein, Beth A. Angst, Christina M. Shanti, Mo Rastgaar
     School of Engineering Technology, Purdue University, West Lafayette,
     Indiana, USA; Department of Surgery, Division of Pediatric Surgery,
     Children's Hospital of Michigan & Wayne State University, Michigan, USA

O.   Internet-of-Things Monitoring of Physical Restraint Patients
     Chelsea Yeh, Alexander W Lee, Melissa S Lee, Karin C Li
     Walnut Valley Research Institute, Walnut, California, USA;
     University of California Riverside School of Medicine, Riverside,
     California, USA

O.   Real-Time Monitoring of Urine Output with Internet-of-Things Connected
     Foley Catheters
     Alexander W. Lee, Hsi-Jen James Yeh
     Department of Engineering and Computer Science, Azusa Pacific University,
     Azusa, California, USA; Walnut High School, Walnut, California, USA

O.   Development of a Healthcare Monitoring Diabetes Mobile Application for Community
     Kanyarat Bussaban, Kanyarat Bussaban, Nareenart Ruksuntorn, Jaruwan Chutrtong,
     Chanyapat Sangsuwan
     Faculty of Science and Technology, Suan Sunandha Rajabhat University,
     Bangkok, Thailand; Computer Science Program, Suan Sunandha Rajabhat
     University, Bangkok, Thailand; Robotics Engineering Program, Faculty of
     Industrial Technology, Suan Sunandha Rajabhat University, Bangkok, Thailand

O.   Steady-state Visual Evoked Potential Classifiers for their use in
     Industrial Brain-Computer Interfaces
     Dmitri Bryzgalov, Gaspard Andre
     Capgemini Engineering, Paris, France;
     Departement Mathematiques, Universite Paris Saclay, Paris, France

O.   Nutrient Profiles of Food Items in Adolescent Diet: A Cluster Analysis of Data
     Collected from a High School Citizen Science Project
     Jonah T. Treitler, Senait Tekle, Jennifer Ushe, Qing Zeng
     Jefferson High School for Science and Technology, Alexandria, Virginia, USA;
     Department of Clinical Research and Leadership, George Washington University,
     Washington, DC, USA; Alexandria City Public Schools, Alexandria, Virginia, USA

O.   Monitoring Circadian Rhythms of Night-shift Operators with Hidden Markov Models
     Rodrigo Balp, Solene Le Bars
     Altran Technologies, Capgemini Engineering, Meudon, France;
     Altran Lab, Capgemini Engineering, Meudon, France

O.   HCI for Mobile Healthcare During the COVID-19 Pandemic
     Mitchell Macuga, Nicholas Wysocki, Rick Dymond, Terrell Brooks,
     Travis Bauman, Zachary Layman, Mohammed Mahmoud
     Department of Computer Science and Engineering, Oakland University,
     Rochester, Michigan, USA;
     Department of Computer Science, Bemidji State University,
     Bemidji, Minnesota, USA

O.   The Applications of Machine Learning in Medicine
     Sailesh Bk, Nicholas Schmidberger, Louis Bentil, Shukri Ali,
     Steven Westmoreland, Mohammed Mahmoud
     Department of Computer Science & Information Systems,
     Minnesota State University, Moorhead, Minnesota, USA;
     Department of Computer Science, Bemidji State University,
     Bemidji, Minnesota, USA

RESEARCH TRACK ON SOFTWARE ENGINEERING (CSCI-RTSE)
https://american-cse.org/csci2022/RTSE
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O. Towards Specification Completion for Systems with Emergent Behavior based
    on DevOps
    Mohamed Toufik Ailane, Adina Aniculaesei, Christoph Knieke,
    Andreas Rausch, Fauzi Sholichin
    Institute for Software and Systems Engineering, Clausthal University of
    Technology, Clausthal-Zellerfeld, Germany

O. Test Case Prioritization for Mobile Apps
    Zeinab Abdalla, Kerstin Haring, Anneliese Andrews
    Department of Computer Science, University of Denver, Denver, Colorado, USA

O. Guidelines for Combining Regression Testing Approaches
    Zeinab Abdalla, Kerstin Haring, Anneliese Andrews
    Department of Computer Science, University of Denver, Denver, Colorado, USA

O. Uncertainty and Dependency-wise Requirements Prioritization
    Norah Ibrahim Alfassam, Mohammad Abdullah-Al-Wadud, Mubarak Rashed Alrashoud
    College of Computer and Information Sciences, King Saud University,
    Riyadh, Saudi Arabia

O. A Process Model for Ensuring Diffusion and Adhesion of Cybersecurity
    Innovations in Software Development Organizations
    Gregory Vsevolozhsky, Yanzhen Qu
    School of Computer Science, Colorado Technical University,
    Colorado Springs, Colorado, USA

O. Towards the Development of Text-based Format Converters for Object
    Representation
    Carlos R. Jaimez-Gonzalez, Betzabet Garcia-Mendoza
    Departamento de Tecnologia de la Informacion, Universidad Autonoma
    Metropolitana, Unidad Cuajimalpa, Mexico City, Mexico

O. Improvement Quality Software Requirements by using a Triplet Structure
    Bruel Gerancon, Sylvie Trudel
    Department of Computer Science, University of Quebec at Montreal,
    Montreal, Canada

O. Web System for Storing and Visualizing Web Objects in XML
    Jose M. Hernandez-Salinas, Carlos R. Jaimez-Gonzalez, Betzabet Garcia-Mendoza
    Departamento de Tecnologia de la Informacion, Universidad Autonoma
    Metropolitana, Unidad Cuajimalpa, Mexico City, Mexico

O. Identifying Impact Criteria for Software Requirements Verification and
    Validation Tools Selection
    Khalid Aldousari, Mohammad Abdullah-Al-Wadud
    Department of Software Engineering, King Saud University, Riyadh, Saudi Arabia

O. Automating File Operations via Python
    Andrew Miller, Nicholas Kobylski, Elias Qamar, Jimmy Xiao, Nicholas Veal,
    Richard Kenney, Nicholas Wysocki, Mohammed Mahmoud
    Department of Computer Science and Engineering, Oakland University,
    Rochester, Michigan, USA;
    Department of Computer Science, Bemidji State University,
    Bemidji, Minnesota, USA

RESEARCH TRACK ON EDUCATION (CSCI-RTED)
https://american-cse.org/csci2022/RTED
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O. 'WHO DONE IT?' A Multidisciplinary Mobile Device Forensics Framework: From
    Theory to Practice with Intermediate Students
    Frances C. Dancer, April L. Tanner, Mya N. Thomas, Mary M. Thomas
    Department of Electrical and Computer Engineering & Computer Science,
    Jackson State University, Jackson, Mississippi, USA;
    Shelby County Schools, Memphis, Tennessee, USA

O. Concept and Realization to Automatically Generate Test and Training Data for
    a Natural Language Processing Algorithm for the Assessment of Free Text
    Answers for Digital Courses on Work Design in the Context of Psychology
    Studies in Higher Educational Institutions
    Ramona Srbecky, Franz Buhler, Simon Alexander Wetzel, Michael Winterhagen,
    Wieland Fraas, Matthias Hemmje
    Multimedia and Internet-applications, University of Hagen, Hagen, Germany;
    Industrial and Organizational Psychology, University of Hagen, Hagen, Germany

O. Developing an Interdisciplinary Curriculum for Educational Robotics:
    Programming, STEM, and Art
    Lauren Harter, Alaina Caulkett
    Education, VEX Robotics, Pittsburgh, USA

O. Co-designing Immersive and Inclusive Virtual Museum with Children and People
    with Disabilities: A Pilot Study
    Aldo Caldarelli, Stefano di Tore, Silvia Ceccacci, Michele Domenico Todino,
    Lucia Campitiello, Catia Giaconi
    Educational Neurosciences and Sports Lab - HERACLE, Niccolo Cusano University
    of Rome, Rome, Italy; Department Humanities, Philosophy and Education,
    University of Salerno, Fisciano (SA), Italy; Department of Education,
    Cultural Heritage and Tourism, University of Macerata, Macerata, Italy;
    Department Humanities, Philosophy and Education, University of Salerno,
    Fisciano (SA), Italy

O. Showcasing Native Wildflowers in Virtual Reality
    Andy Wagner, Leonidas Deligiannidis
    School of Computing and Data Science, Wentworth Institute of Technology,
    Boston, Massachusetts, USA

O. Simulating Turing Machine in Augmented Reality
    Wanwan Li
    University of South Florida (USF), Florida, USA

O. The Use of Technology to Overcome Transitional Challenges of First Year
    Students from Face-To-Face to Online
    Munienge Mbodila, Tembo Francine Kikunga
    Department of Information Technology Systems, Walter Sisulu University,
    South Africa

O. Open-Source Educational Tool Development: An Experiential Capstone Report
    Joseph Faulkner, Matthew McNulty
    Southeastern Louisiana University, Louisiana, USA

O. Teacher Practices for Computational Thinking Implementation in
    Elementary Science
    Jennifer Pietros, Sara Sweetman, Minsuk Shim
    Education Department, Univeristy of Rhode Island, Kingston, Rhode Island, USA

O. An Educational Software for Digital Terrestrial Television Broadcasting
    (DTTB) Systems to Engineering Students using Python
    Konstantinos Zarkadas, Apollon Smyrnaios, George Dimitrakopoulos
    Department of Informatics & Telematics, Harokopio University, Athens, Greece;
    Real Property Department at ERT, S.A. Hellenic Broadcasting Comporation, Greece

O. Review of Video Games and Simulation in Computer Science Education
    Joel Weymouth, Rose Atuah
    Morgan State University, Baltimore, Maryland, USA;
    Computer and Information Systems, Towson University, Towson, Maryland, USA

O. Students Behaviors and Factors Affecting Online Learning during the COVID-19
    Situation Based on Machine Learning
    Jaruwan Chutrtong, Narumon Boonman, Supatchalee Sirichokworrakit,
    Kunyanuth Kularbphettong
    Suan Sunandha Rajabhat University, Bangkok, Thailand

O. Industry Connect Initiative: A Real World Ready Case Study in
    Information Systems
    Caleb Martin, Jared Martin, Bonnie Achee, Ghassan Alkadi
    Southeastern Louisiana University, Hammond, Louisiana, USA

O. Gateway Scholars Program - Reducing Barriers to STEM for Undergraduate
    Students through Scholarship and Supportive Programs
    Julia Thom Oxford (may be Diane Smith)
    Department of Biological Sciences, Biomolecular Research Center, Center of
    Excellence in Biomedical Research, Boise State University, Boise, Idaho, USA

O. An Educational Perspective on Online Learning Platforms
    Cameron Schwartz, Jason Wahby, Geko Ezekiel Jimenez, Kemal Koymen,
    Hunter Doll, Mohammed Mahmoud
    Department of Computer Science and Engineering, Oakland University,
    Rochester, Michigan, USA;
    Department of Computer Science, Bemidji State University,
    Bemidji, Minnesota, USA