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CSCI 2024 CONFERENCE SCHEDULE

The 2024 International Conference on Computational Science and Computational Intelligence

https://www.american-cse.org/csci2024/

December 11-13, 2024
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.

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REGISTRATIONS / CONFERENCE PACKET PICKUP:

December 10, 2024 (Tuesday): 03:00pm - 06:00pm (Lotus Ballrooms 2 & 3)
December 11, 2024 (Wednesday): 07:00am - 05:00pm (Lotus Ballrooms 2 & 3)
December 12, 2024 (Thursday): 07:00am - 05:00pm (Lotus Ballrooms 2 & 3)
December 13, 2024 (Friday): 07:00am - 04:00pm (Lotus Ballrooms 2 & 3)

REFRESHMENTS/BREAKFASTS/RECEPTION:

December 11, 2024 (Wednesday):
CONTINENTAL BREAKFAST: 07:20am - 08:20am (Lotus Ballrooms 2 & 3)
REFRESHMENT BREAK: 10:00am - 10:20am (Lotus Ballrooms 2 & 3)
REFRESHMENT BREAK + POSTERS: 03:00pm - 03:40pm (Lotus Ballrooms 2 & 3)

December 12, 2024 (Thursday):
CONTINENTAL BREAKFAST: 07:20am - 08:20am (Lotus Ballrooms 2 & 3)
REFRESHMENT BREAK: 10:00am - 10:20am (Lotus Ballrooms 2 & 3)
REFRESHMENT BREAK + POSTERS: 03:00pm - 03:40pm (Lotus Ballrooms 2 & 3)
CONFERENCE RECEPTION DINNER: 07:15pm - 09:10pm (LOTUS Ballrooms)

December 13, 2024 (Thursday):
CONTINENTAL BREAKFAST: 07:20am - 08:20am (Lotus Ballrooms 2 & 3)
REFRESHMENT BREAK: 10:00am - 10:20am (Lotus Ballrooms 2 & 3)
REFRESHMENT BREAK + POSTERS: 03:00pm - 03:20pm (Lotus Ballrooms 2 & 3)

PRESENTATIONS OF GENERAL INTEREST (OPENING REMARKS, KEYNOTES, ...):
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OPENING REMARKS:
CSCI 2024 Steering Committee representative,
Professor Emeritus Hamid R. Arabnia
School of Computing, University of Georgia, USA;
Editor-in-Chief, The Journal of Supercomputing (Springer Nature);
Editor, Transactions of Computational Science & Computational Intelligence (Springer Nature)
Date & Time: December 11, 2024, Wednesday - 08:20am -8:40am
(LOCATION: Ballrooms Galleria D-E)

KEYNOTE:
TO TRUST, OR NOT TO TRUST, WHO IS MAKING THE DECISIONS: A LOOK AT THE LIMITS OF AI DECISION MAKING
Professor John Murray
Academic Dean, Faculty of Business & Technology &
Professor of Robotics and Autonomous Systems,
University of Sunderland, UK
Date & Time: December 11, 2024, Wednesday - 08:40am - 09:40am
(LOCATION: Ballrooms Galleria D-E)

SHORT TALK: APPRECIATING THE VITAL ROLE OF PUBLISHERS
Professor Emeritus Hamid R. Arabnia
Date & Time: December 11, 2024, Wednesday - 09:40am - 10:00am
(LOCATION: Ballrooms Galleria D-E)

KEYNOTE:
AI FAIRNESS TO EMPOWER EQUITY IN HEALTHCARE: ADDRESSING BIAS IN AI-POWERED MEDICAL IMAGE SEGMENTATION
Dr. Soheyla Amirian
Seidenberg School of Computer Science and Information Systems,
Pace University, New York, USA;
Director, Applied Machine Intelligence Initiatives & Education (AMIIE) Lab., USA;
2023 IEEE Atlanta Section Outstanding Educator awardee
Date & Time: December 12, 2024, Thursday - 08:20am - 09:00am
(LOCATION: Ballrooms Galleria D-E)

KEYNOTE:
DATA LEAKAGE IN AI ON BIG DATA-MEDICAL IMAGING
Dr. Farid Ghareh Mohammadi
Mayo Clinic, Florida, USA
Date & Time: December 12, 2024, Thursday - 01:20pm - -2:00pm
(LOCATION: Ballrooms Galleria D-E)

December 10

DECEMBER 10, 2024

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

December 11

DECEMBER 11, 2024

THERE ARE THREE SETS OF CONCURRENT SESSIONS ON December 11, 2024; TWO are ON-SITE PRESENTATIONS (FACE-TO-FACE) IN BALLROOMS GALLERIA D-E AND Lotus Ballroom 1 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)

07:20 - 08-20am: CONTINENTAL BREAKFAST
(LOCATION: Lotus Ballrooms 2-3)

ON-SITE PRESENTATIONS & ACTIVITIES (DECEMBER 11, Wednesday)
LOCATION: Ballrooms Galleria D-E
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08:20 - 08:40am: OPENING REMARKS - December 11, 2024, Wednesday;
CSCI 2024 Steering Committee representative,
Professor Emeritus Hamid R. Arabnia
School of Computing, University of Georgia, USA;
Editor-in-Chief, The Journal of Supercomputing (Springer Nature);
Editor, Transactions of Computational Science & Computational Intelligence (Springer Nature)
(LOCATION: Ballrooms Galleria D-E)

08:40 - 09:40am: KEYNOTE:
TO TRUST, OR NOT TO TRUST, WHO IS MAKING THE DECISIONS: A LOOK AT THE LIMITS OF AI DECISION MAKING
Professor John Murray
Academic Dean, Faculty of Business & Technology &
Professor of Robotics and Autonomous Systems,
University of Sunderland, UK
(LOCATION: Ballrooms Galleria D-E)

09:40 - 10:00am: APPRECIATING THE VITAL ROLE OF PUBLISHERS
Publishers play a critical role in disseminating knowledge, ensuring the quality and credibility of content through peer review, and providing a platform for authors to share their work with a global audience. They bridge the gap between creators and readers, fostering the exchange of ideas and advancing progress across disciplines.
(LOCATION: Ballrooms Galleria D-E)

10:00 - 10:20am: BREAK (Refreshments)
(LOCATION: Lotus Ballroom 2-3)

SESSION 1A-WED: (CONCURRENT SESSION WITH ON-SITE SESSION 5B-WED & ON-LINE SESSIONS)
HEALTH INFORMATICS AND MEDICAL SYSTEMS (CSCI-RTHI) &
COMPUTATIONAL BIOLOGY (CSCI-RTCB)
https://www.american-cse.org/csci2024/RTHI
https://www.american-cse.org/csci2024/RTCB
Chairs: TBA
December 11, 2024 (Wednesday); 10:20am - 12:20pm
(LOCATION: Ballrooms Galleria D-E)

10:20 - 10:40am: Extending a Highly Configurable EMA and JITAI Mobile App Framework with Passive Sensing, Gamification and AI Capabilities for a Large-Scale Physical Activity and Nutrition Study
Carsten Vogel, Robin Kraft, Rodrigo Antunes Lima,
Abdul Rahman Idrees, Patrick Steiger, Rudiger Pryss
Institute of Clinical Epidemiology and Biometry, University of Wurzburg, Germany;
Centro de Investigacion en Red de Salud Mental, Madrid, Spain;
Department of Clinical Psychology and Psychotherapy,
Ulm University, Ulm, Germany;
Institute of Databases and Information Systems,
Ulm University, Ulm, Germany

10:40 - 11:00am: FREE SLOT

11:00 - 11:20am: Brain Tumor Localization with ViT and a Loss Function Based on Complete Intersection Over Union
Hong Cheng, Rupesh Konduru
Department of Math and Computer Science, Southern Arkansas University, Magnolia, Arkansas, USA

11:20 - 11:40am: Exploring the Application of Process Mining on Tinnitus Patient Data
Miriam Schluter, Rudiger Pryss, Winfried Schlee, Manfred Reichert, Michael Winter
Institute of Clinical Epidemiology and Biometry, University of Wurzburg, Germany;
Institute of Medical Data Science, University Hospital of Wurzburg, Germany;
Institute for Information and Process Management, Eastern Switzerland University of Applied Sciences, St. Gallen, Switzerland;
Institute of Databases and Information Systems, Ulm University, Ulm, Germany

11:40 - 12:00pm: Leveraging Nearest Neighbors for Faithful scHi-C Data Imputation
Bin Zhao, Lu Liu
Department of Computer Science, North Dakota State University, Fargo, North Dakota, USA;
First Citizens Bank, Raleigh, North Carolina, USA

12:00 - 12:20pm: PT-AML: Machine Learning Framework to Identified Personalized Treatments for Acute Myeloid Leukemia
Siddhi P. Jani, Raghvendra Mall
Centre of Brain Research, Indian Institute of Sciences, Bangalore, Karnataka, India;
Biotechnology Research Center, Technology Innovation Institute, Abu Dhabi, UAE;
Department of Immunology, St. Jude Children's Research Hospital, Memphis, Tennessee, USA

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

SESSION 2A-WED: (CONCURRENT SESSION WITH ON-SITE SESSION 6B-WED & ON-LINE SESSIONS)
COMPUTATIONAL SCIENCE &
SMART CITIES AND SMART MOBILITY
https://www.american-cse.org/csci2024/RTCS
https://www.american-cse.org/csci2024/RTSC
Chairs: TBA
December 11, 2024 (Wednesday); 01:20pm - 03:00pm
(LOCATION: Ballrooms Galleria D-E)

01:20 - 01:30pm: Nonlinear Surface Waves in a Three-Dimensional Channel of Variable Cross-Section with the Effects of Rotation
Ranis N. Ibragimov
De Gruyter, MA, USA

01:30 - 01:40pm: Secure Federated Learning for Autonomous Transportation Systems
M. Hadi Amini
Knight Foundation School of Computing and Information Sciences,
Florida International University, Florida, USA;
Associate Director, USDOT UTC National Center for Transportation
Cybersecurity and Resiliency (TraCR), USA

01:40 - 02:00pm: A Simplified MILP Framework for Task Offloading in Vehicular Networks
Ramon J. Duran Barroso, Ignacio de Miguel, Camilo Anzola,
Soheil Hosseini, Maryam Massoumi, Hafiza Kanwal Janjua,
Miguel Silva, Noemi Merayo, Juan Carlos Aguado, Alfonso Bahillo,
Patricia Fernandez, Ruben Lorenzo, Evaristo J. Abril
Universidad de Valladolid, Valladolid, Spain

02:00 - 02:20pm: Critiques on the HSI Color Model and a Solution to its Gamut Problem
Tieling Chen
University of South Carolina Aiken, Aiken, South Carolina, USA

02:20 - 02:40pm: Motivation and Implementation Approaches for Operation of Local Power Grids based on Energy Communities
Steffen Spaethe
Friedrich Schiller University Jena, Jena, Germany

02:40 - 03:00pm: Modeling and Simulation of a Green Seaport Power System with Photovoltaics and Energy Storage Systems
Corey Zaas, Alejandra Zapata, Taufik, Ali Dehghan-Banadaki,
and Majid Poshtan
California Polytechnic State University, San Luis Obispo,
California, USA

03:00 - 03:40pm: BREAK (Refreshments) & POSTER SESSIONS
December 11, 2024 (Wednesday)
(LOCATION: Lotus Ballroom 2-3)

O. Design and Implementation of a Customized Public Information Web Service
I. G. Lee, Y. J. Jeong, H. K. Kim
Department of Computer Engineering,
Andong National University, South Korea

O. An Ensemble Scoring System for User Comment Sentiment Analysis
Fu-Shing Sun
Department of Computer Science, Ball State University,
Muncie, Indiana, USA

O. Typing Dynamics as a Tool for User Identification: Investigating the Potential Role of Unique Behaviors
Nuwra Al-Ahmary, James Braman
Community College of Baltimore County, Baltimore, Maryland, USA

O. Analyzing the Practical Efficacy of Modern AI in Malware Detection
Scott Fitz Gerald
University of North Georgia, Dahlonega, Georgia, USA

O. Development of Simulation Board and Control Software for BMS Testing of Electric Batteries
Song-Hee Park, Ki-Ryong Cha, Young-Hyung Kim
Department of Electronic Engineering, Kumoh National Institute of Technology, Gumi, Korea;
SUNGWOON, Gumi, Korea

O. MSFF: An Automated Multi-Scale Feature Fusion Deep Learning Model for Spine Fracture Segmentation Using MRI
Muhammad Usman Saeed, Aqsa Dastgir
School of Computer Science and Engineering,
Central South University, Changsha, China

SESSION 3A-WED: (CONCURRENT SESSION WITH ON-SITE SESSION 7B-WED & ON-LINE SESSIONS)
CYBER WARFARE, CYBER DEFENSE, & CYBER SECURITY
https://www.american-cse.org/csci2024/RTCW
Chairs: Dr. Tan Le;
Electrical & Computer Engineering Department, Hampton University, USA
December 11, 2024 (Wednesday); 03:40pm - 04:40pm
(LOCATION: Ballrooms Galleria D-E)

03:40 - 04:00pm: Dynamic Malware Detection using LSTM based GANs and Linux System Calls
Jeffrey C. Rombough, Larbi Esmahi
Athabasca University, Canada

04:00 - 04:20pm: Verification and Comparison of "cannot be proved" Outputs in ProVerif Using the Tamarin Prover
Mieno Takehiko, Hiroyuki Okazaki
EPSON AVASYS Corporation, Shimonogo Otsu, Ueda City, Nagano, Japan;
Graduate School of Science and Technology, Shinshu University, Japan

04:20 - 04:40pm: Cyber Progression of the Domains of Warfare
R. Alexander Nichols
Southern Utah University, Cedar City, Utah, USA

SESSION 4A-WED: (CONCURRENT SESSION WITH ON-SITE SESSION 7B-WED & ON-LINE SESSIONS)
MOBILE COMPUTING, WIRELESS NeTWORKS, & SECURITY +
CLOUD COMPUTING AND DATA CENTERS
https://www.american-cse.org/csci2024/RTMC
https://www.american-cse.org/csci2024/RTCC
Chairs: TBA
December 11, 2024 (Wednesday); 04:40pm - 06:00pm
(LOCATION: Ballrooms Galleria D-E)

04:40 - 05:00pm: Dynamic Interference Suppression for Radar and Communication Cohabitation
Tan Le, Van Le
School of Engineering, Architecture and Aviation, Hampton University, Hampton, Virginia, USA;
Advanced Technology Center, Virginia Beach, Virginia, USA

05:00 - 05:20pm: SARS: A Resource Selection Algorithm for Autonomous Driving Tasks in Heterogeneous Mobile Edge Computing
Reza Zakerian, Hadi Gholami
Independent Researcher, Amol, Mazandaran, Iran;
Saint Louis University, Saint Louis, MO, USA

05:20 - 05:40pm: Development of a Mobile Application for Tracking Daily Dietary Intake Using Nutrition Labelling
Nuntaporn Aukkanit, Shutchapol Chopvitayakun, Supatchalee Sirichokworrakit, Jaruwan Chutrtong, Chanyapat Sangsuwon, and Kunyanuth Kularbphettong
Faculty of Science and Technology, Suan Sunandha Rajabhat University, Bangkok, Thailand

05:40 - 06:00pm: FREE SLOT

ON-SITE PRESENTATIONS & ACTIVITIES (DECEMBER 11, Wednesday)
LOCATION: Lotus Ballroom 1
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SESSION 5B-WED: (CONCURRENT SESSION WITH ON-SITE SESSION 1A-WED & ON-LINE SESSIONS)
EDUCATION - CS & CE
https://www.american-cse.org/csci2024/RTED
Chairs: TBA
December 11, 2024 (Wednesday); 10:20am - 12:20pm
(LOCATION: Lotus Ballroom 1)

10:20 - 10:40am: Using Lego to Model Landscapes and Robotics for Hobbyists and in Educational Settings
Eamon Doherty, Paulette Laubsch, Elly Goei, Matt Heff
School of Administrative Science, Fairleigh Dickinson University (FDU), Teaneck, New Jersey, USA;
School of Public and Global Affairs, Fairleigh Dickinson University (FDU), Florham Park, New Jersey, USA;
Drew University, Madison, New Jersey, USA;
Utah LEGO Users Group, USA

10:40 - 11:00am: Adapting Computer Science Education to a New Student Era
Katia Maxwell
Athens State University, Athens, Alabama, USA

11:00 - 11:20am: Enhancing Student's Learning by Integrating the Concept of Project-Based and Challenge-Based Learning
Kunyanuth Kularbphettong, Nareenart Raksuntorn,
Pattarapan Roonrakwit, Chongrag Boonseng
Suan Sunandha Rajabhat University, Bangkok, Thailand;
Silpakorn University, Bangkok, Thailand;
King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand

11:20 - 11:40am: Decoding Complexity: Empowering Learners in Algorithm and Theory Comprehension
Dewan Tanvir Ahmed
Department of Computer Science, University of North Carolina at Charlotte, North Carolina, USA

11:40 - 12:00pm: Investigating Key Factors Influencing Student Satisfaction in HyFlex Learning: A Confirmatory Factor Analysis Study
Shutchapol Chopvitayakun, Montean Rattanasiriwongwut,
and Nuntaporn Aukkanit
Faculty of Science and Technology, Suan Sunandha Rajabhat University, Bangkok, Thailand;
Faculty of Information Technology and Digital Innovation,
King Mongkut's Institute of Technology North Bangkok, Thailand

12:00 - 12:20pm: Bouncing into Counting and Probability
Peter M. Maurer
Department of Computer Science, Baylor University,
Waco, Texas, USA

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

SESSION 6B-WED: (CONCURRENT SESSION WITH ON-SITE SESSION 2A-WED & ON-LINE SESSIONS)
ARTIFICIAL INTELLIGENCE
https://www.american-cse.org/csci2024/RTAI
Chairs: TBA
December 11, 2024 (Wednesday); 01:20pm - 03:00pm
(LOCATION: Lotus Ballroom 1)

01:20 - 01:40pm: Leveraging Artificial Intelligence for Transformative Human Resource Management: Enhancing Recruitment, Retention, and Employee Development
Alaa Amin Abdalla
Academic Programs for Military Colleges, Abu Dhabi University,
Abu Dhabi, UAE

01:40 - 02:00pm: Advanced Forecasting of CCPP Output Power Using Regression and Neural Network Models
Seyed Ali Baniaghil, Vatsalkumar Vipulkumar Shah, Love Kaushal Fadia,
Mohammad Hassanzadeh, Majid Ahmadi, Jonathan Wu
University of Windsor, Windsor, Canada

02:00 - 02:20pm: Testing Effects of Potential Adversary Manipulations of Ship-Tracking Data
Neil C. Rowe, Gabriel Lipow, Aroshi Ghosh, Lahari Yallapragada
U.S. Naval Postgraduate School, Monterey, California, USA

02:20 - 02:40pm: Follow the Crowd but Keep Myself: Understanding the Role of Crowd Wisdom and Individual User Taste in Rating Prediction
Liang Wang, Shubham Jain, Yingtong Dou, Junpeng Wang,
Chin-Chia Michael Yeh, Yujie Fan, Prince Aboagye, Yan Zheng, Xin Dai,
Zhongfang Zhuang, Uday Singh Saini, Wei Zhang, Mahashweta Das
Visa Research, Foster City, California, USA

02:40 - 03:00pm: Collaborative Design between Intelligent Agents through Resource Sharing
Jules Chenou, Tonya Fields, Aurelia Williams
Cybersecurity Complex, Norfolk State University,
Norfolk, Virginia, USA

03:00 - 03:40pm: BREAK (Refreshments) & POSTER SESSIONS
December 11, 2024 (Wednesday)
(LOCATION: Lotus Ballroom 2-3)

O. Design and Implementation of a Customized Public Information Web Service
I. G. Lee, Y. J. Jeong, H. K. Kim
Department of Computer Engineering,
Andong National University, South Korea

O. An Ensemble Scoring System for User Comment Sentiment Analysis
Fu-Shing Sun
Department of Computer Science, Ball State University,
Muncie, Indiana, USA

O. Typing Dynamics as a Tool for User Identification: Investigating the Potential Role of Unique Behaviors
Nuwra Al-Ahmary, James Braman
Community College of Baltimore County, Baltimore, Maryland, USA

O. Analyzing the Practical Efficacy of Modern AI in Malware Detection
Scott Fitz Gerald
University of North Georgia, Dahlonega, Georgia, USA

O. Development of Simulation Board and Control Software for BMS Testing of Electric Batteries
Song-Hee Park, Ki-Ryong Cha, Young-Hyung Kim
Department of Electronic Engineering, Kumoh National Institute of Technology, Gumi, Korea;
SUNGWOON, Gumi, Korea

O. MSFF: An Automated Multi-Scale Feature Fusion Deep Learning Model for Spine Fracture Segmentation Using MRI
Muhammad Usman Saeed, Aqsa Dastgir
School of Computer Science and Engineering,
Central South University, Changsha, China

SESSION 7B-WED: (CONCURRENT SESSION WITH ON-SITE SESSION 3A-WED & 4A-WED & ON-LINE SESSIONS)
SIGNAL & IMAGE PROCESSING, COMPUTER VISION & PATTERN RECOGNITION + Computational Science (RTCS)
https://www.american-cse.org/csci2024/RTPC
Chairs: Dr. Farid Ghareh Mohammadi; Mayo Clinic, Florida, USA
December 11, 2024 (Wednesday); 03:40pm - 06:00pm
(LOCATION: Lotus Ballroom 1)

03:40 - 04:00pm: Stacked Deep Learning Model for Facial Biometric Detection from Video Dataset
Salahaldeen Duraibi, Sameena Shaik, Sangeetha Komandur, and Saahira banu Ahamed Maricar
Department of Computer and Network Engineering, College of Engineering and Computer Science, Jazan University, Jazan, Saudi Arabia

04:00 - 04:20pm: Leveraging Bayer Pattern Analysis for Authenticity Detection of Real and Fake Images
Junbin Zhang, Hamid Reza Tohidypour, Panos Nasiopoulos, Larry Liu, Ziyao Wang, Eric Cao, Olasunade Ladenegan
Department of Electrical and Computer Engineering,
University of British Columbia, Vancouver, Canada

04:20 - 04:40pm: A Method for Visualizing Prediction Basis in Image Regression Deep Learning Models
Kenta Miyake, Seiichi Ozawa, Atsushi Fukuda, Wataru Fukui, and Ichiro Hirata
Graduate School of Engineering, Kobe University, Kobe, Hyogo, Japan;
Hyogo Prefectural Institute of Technology, Suma, Kobe, Hyogo, Japan

04:40 - 05:00pm: A Novel Image Enhancement Method for Dimmed Displays Based on JND and Human Frequency Sensitivity
Hamid Reza Tohidypour, Panos Nasiopoulos, Kristyn Lee, Catherina Liu, George Du, Yubo Wang
Department of Electrical and Computer Engineering,
University of British Columbia, Vancouver, Canada

05:00 - 05:20pm: Comparative Analysis of Color Invariants for Image Retrieval
Wen Cheng, Chunchao Lane
Southern Arkansas University, Magnolia, Arkansas, USA;
St. Mary's College of Maryland, St. Mary's City, Maryland, USA

05:20 - 05:40pm: ASIP Design Flow Automation with Node-Based Programming
Sa'ed Abed, Ali Nawab, Hanaa Alrushood, Amjad Gawanmeh
Computer Engineering Department, Kuwait University, Kuwait City, Kuwait;
Department of Electrical Engineering, University of Dubai, UAE

05:40 - 06:00pm: FREE SLOT

ON-LINE PRESENTATIONS (DECEMBER 11 - Wednesday)

PLEASE NOTE THAT ALL DATES AND TIMES MENTIONED IN THIS DOCUMENT ARE IN TERMS OF LAS VEGAS TIME-ZONE (USA Pacific Time-zone).

The conference has 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 possible, speakers are expected to connect at the beginning 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. 11-13, 2024), please contact csci.zoom@gmail.com

SESSION 1-ONLINE: COMPUTATIONAL SCIENCE (RTCS) + ARTIFICIAL INTELLIGENCE (RTAI)

https://www.american-cse.org/csci2024/RTCS
https://www.american-cse.org/csci2024/RTAI
December 11, 2024 (Wednesday); 08:00am - 12:00pm
(ONLINE - ZOOM)

08:00 - 08:20am: A Fully Automated Derivation of the Marsden-Herman Theorem from the Foulis-Holland Theorems in Orthomodular Lattice Theory
Jack K. Horner
Independent Researcher, Lawrence, Kansas, USA

08:20 - 08:40am: Synergizing AHP and Cooperative Information Systems for Effective Research Management
Otmane Azeroual
German Centre for Higher Education Research and Science Studies (DZHW), Berlin, Germany

08:40 - 09:00am: A Finite-Domain-Based Automated Proof of the Consistency of a "Segment-Construction" Variant of Tarski's Elementary Geometry
Jack K. Horner
Independent Researcher, Lawrence, Kansas, USA

09:00 - 09:20am: Sentence-level Adversarial Examples in Arabic
Basemah Alshemali
College of Computer Science and Engineering, Taibah University, Almadinah, Saudi Arabia, KSA

09:20 - 09:40am: Sequential Disaggregation of Residential Energy Consumption Using Random Forest Regression
Hasan Rafiq, Prajowal Manandhar, Edwin Rodriguez-Ubinas
DEWA R&D Centre, Dubai Electricity and Water Authority, Dubai, UAE

09:40 - 10:00am: Towards Evaluating Large Language Models for Graph Query Generation
Siraj Munir
Department of Pure and Applied Sciences,
University of Urbino Carlo Bo, Urbino, Italy

10:00 - 10:20am: Action Prediction with Edge Generative AI for Mice Pre-Clinical Studies
Gioele Fiorenza, Danilo Pietro Pau, Raimondo Schettini
STMicroelectornics, University of Milano-Bicocca, Milano, Italy;
STMicroelectronics, Agrate Brianza (MB), Italy;
University of Milano-Bicocca, Milano, Italy

10:20 - 10:40am: Hallucinations and Training-data Bias: Results from two number transcription experiments using GPT models
Nemi Pelgrom, Johan Hagelback, Morgan Ericsson, Jonas Nordqvist, Hakan Grahn
Department of Computer Science and Media Technology, Linnaeusuniversity, Vaxjo, Sweden;
Department of Computer Science, Blekinge Tekniska Hogskola, Karlskrona, Vaxjo, Sweden

10:40 - 11:00am: Can Bad Decisions be Avoided using Artificial Intelligence?
Ahmed Elragal, Ahmed Amin, Nada Elgendy
Lulea University of Technology, Lulea, Sweden;
German University in Cairo, Cairo, Egypt;
University of Oulu, Oulu, Finland

11:00 - 11:20am: Human Activity Recognition Using Neural Networks
Daniel A. Goncalves, Ramiro S. Barbosa
Institute of Engineering - Polytechnic of Porto (ISEP/IPP), Department of Electrical Engineering, Porto, Portugal;
GECAD - Research Group on Intelligent Engineering and Computing for Advanced Innovation and Development, ISEP/IPP, Porto, Portugal

11:20 - 11:40am: Analyzing Insurance Cost Estimation: A Supervised Regression Approach
Tonni Das Jui, Pablo Rivas
Baylor University, Waco, Texas, USA

11:40 - 12:00pm: Machine Learning-Based Prediction of Rabies Outbreaks Using Epidemiological and Environmental Data in Africa
Justice Williams Asare, Akwasi Asare, Seth Alornyo, Emmanuel Akwah Kyei, Emmanuel Freeman, William Leslie Brown-Acquay, Isreal Edem Agbehadji, Richard Millham
Faculty of Applied Science and Technology, Koforidua Technical University, Koforidua, Ghana;
Faculty of Computing and Information Systems, Ghana Communication Technology University, Accra, Ghana;
Faculty of Accounting and Informatics, Durban University of Technology, Durban, South Africa

SESSION 2-ONLINE: Computational Science (RTCS)
https://www.american-cse.org/csci2024/RTCS
December 11, 2024 (Wednesday); 12:00pm - 01:40pm
(ONLINE - ZOOM)

12:00 - 12:20pm: An Efficient Algorithm to Generate all Labeled Graphs with a Given Graphical Degree Sequence
Kai Wang
Department of Computer Science, Georgia Southern University, Statesboro, Georgia, USA

12:20 - 12:40pm: Development of a Computational Framework for Assessing Coercive Control in Groups
Courtney L. Crooks, Sara Morrell
Georgia Tech Research Institute, Atlanta, Georgia, USA;
College of Computing, School of Cybersecurity & Privacy, Georgia Institute of Technology, Atlanta, Georgia, USA

12:40 - 01:00pm: Predicting Next-day Spread of Wildfires with Support Tensor Train Machine and Remote-sensing Data
Joshua Ologbonyo, Roger B. Sidje
Department of Mathematics, University of Alabama,
Tuscaloosa, Alabama, USA

01:00 - 01:20pm: Probability Reconstruction for Chemical Kinetics Using Moments
Emmanuel O. Adara, Roger B. Sidje
Department of Mathematics, University of Alabama,
Tuscaloosa, Alabama, USA

01:20 - 01:40pm: Decapsulation Techniques to Expose Integrated Circuit for Forensic Reliability Assessment
Imarat Alnemrat, Ameer Al-Nemrat, Abdessamad Ababou, and Arya Assadi Langroudi
Architecture, Computing, and Engineering School, University of East London, London, UK;
Department of Bioscience, University of East London, London, UK

SESSION 3-ONLINE: EDUCATION - CS & CE (RTED)
https://www.american-cse.org/csci2024/RTED
December 11, 2024 (Wednesday); 01:40pm - 03:40pm
(ONLINE - ZOOM)

01:40 - 02:00pm: Artificial Intelligence and Challenges in a Research-Teaching Model
Diego Trueba Garza, Muhittin Yilmaz
Electrical Engineering and Computer Science Department,
Texas A&M University-Kingsville, Kingsville, Texas, USA

02:00 - 02:20pm: Curriculum for a New Academic Program with Bachelor's Degrees in Electrical Engineering and Intelligent Systems Engineering
Ashu M. G. Solo
Maverick Trailblazers Inc., Wilmington, Delaware, USA

02:20 - 02:40pm: Intrinsic Barriers to Supporting the Integration of Computer Science into Elementary School Subject Areas
Laycee Thigpen, Monica M. Mcgill
Advancing Computing Education (IACE), Institute for Advancing Computing Education, USA

02:40 - 03:00pm: Contemporary Artificial Intelligence Accelerator Cache Design Perspectives
Diego E. Trueba Garza, Diego E. Trevino, Muhittin Yilmaz
Texas A&M University-Kingsville (TAMUK), Kingsville, Texas, USA

03:00 - 03:20pm: Features and Data Needs for a Digital Passport for Computer Science Teacher Professional Development Providers
Joseph Tise, Laycee Thigpen, Monica M. McGill, and Robert Schwarzhaupt
Institute for Advancing Computing Education, Winchester, Virginia, USA;
American Institutes for Research, USA

03:20 - 03:40pm: Virtual Reality in Education: Opportunities and Challenges
Yvette Spivey, Roya Choupani, Scarlet Clouse
Angelo State University, San Antonio, Texas, USA;
Angelo State University, San Angelo, Texas, USA

SESSION 4-ONLINE: HEALTH INFORMATICS AND MEDICAL SYSTEMS +
ARTIFICIAL INTELLIGENCE + IMAGING SCIENCE (RTPC)
https://www.american-cse.org/csci2024/RTHI
https://www.american-cse.org/csci2024/RTAI
December 11, 2024 (Wednesday); 01:40pm - 06:20pm
(ONLINE - ZOOM)

03:40 - 04:00pm: DRNMS: An Enhanced Deep Learning-Based System for Data Recovery and Anomaly Detection in Network Monitoring
Gift Nwatuzie, Hassan Peyravi
Department of Computer Science, Kent State University,
Kent, Ohio USA

04:00 - 04:20pm: Voice Disorder Prediction with Convolutional Neural Network (CNN)
Staphord Bengesi, Hoda El-Sayed
Computer Science Department, Bowie State University,
Bowie, Maryland, USA

04:20 - 04:40pm: Logical Fallacy Detection in Text: Leveraging Large Language Models for Improving Human Discourse
Aravindh Manickavasagam, Danushka Bandara
Syracuse University, Syracuse, New York, USA;
Fairfield University, Fairfield, Connecticut, USA

04:40 - 05:00pm: Predicting Parkinson's Disease with Explainability: A Hybrid Deep Learning Approach Utilizing Voice Dataset
Staphord Bengesi, Hoda El-Sayed, Md Kamruzzaman Sarker
Computer Science Department, Bowie State University,
Bowie, Maryland, USA

05:00 - 05:20pm: Blood Glucose Level Prediction in Type 1 Diabetes Using Machine Learning
Soon Jynn Chu, Nalaka Amarasiri, Sandesh Giri, Priyata Kafle
University of Louisiana at Lafayette, Lafayette, Louisiana, USA;
Hospital for Advanced Medicine & Surgery, Kathmandu, Nepal

05:20 - 05:40pm: Course Scheduling Optimization Using NLP and Algorithmic Approaches
Luis Olmos, Adam Kaplan, Maryam Jalalitabar
Department of Computer Science, California State University,
Northridge, California, USA

05:40 - 06:00pm: Biomedical Text Classification with DistilBERT
Raj Sawhney, An Ly, Marina Chugunova
Institute of Mathematical Sciences, Claremont Graduate University, Claremont, California, USA

06:00 – 06:20pm: On the Detection and Tracking of UAVs in Unreliable Video Feed
Yazan A. Alqudah
Department of Electrical and Computer Engineering, University of West Florida,
Pensacola, Florida, USA

DECEMBER 12, 2024

THERE ARE THREE SETS OF CONCURRENT SESSIONS ON December 12, 2024; TWO are ON-SITE PRESENTATIONS (FACE-TO-FACE) IN BALLROOMS GALLERIA D-E AND Lotus Ballroom 1 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)

07:20 - 08-20am: CONTINENTAL BREAKFAST
(LOCATION: Lotus Ballrooms 2-3)

ON-SITE PRESENTATIONS & ACTIVITIES (DECEMBER 12, Thursday)
LOCATION: Ballrooms Galleria D-E
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08:20 - 09:00am: INVITED/KEYNOTE:
AI FAIRNESS TO EMPOWER EQUITY IN HEALTHCARE: ADDRESSING BIAS IN AI-POWERED MEDICAL IMAGE SEGMENTATION
Dr. Soheyla Amirian
Seidenberg School of Computer Science and Information Systems, Pace University, New York, USA;
Director, Applied Machine Intelligence Initiatives & Education (AMIIE) Laboratory, USA; 2023 IEEE Atlanta Section Outstanding Educator awardee
(LOCATION: Ballrooms Galleria D-E)

SESSION 8A-THU: (CONCURRENT SESSION WITH ON-SITE SESSION 13B-THU & ON-LINE SESSIONS)
HEALTH INFORMATICS AND MEDICAL SYSTEMS
https://www.american-cse.org/csci2024/RTHI
Chairs: TBA
December 12, 2024 (Thursday); 09:00am - 10:00am
(LOCATION: Ballrooms Galleria D-E)

09:00 - 09:20am:
Blockchain Analytics in Healthcare: Leveraging Open Data Standards and Adaptive Business Intelligence for Trustworthy Decision Making
Ricardo Duarte, Joao Cunha, Joao Lopes, Francini Hak,
Tiago Guimaraes, and Manuel Filipe Santos
ALGORITMI/LASI Research Centre, University of Minho, Portugal

09:20 - 09:40am: A Decision Support System for Prioritizing Organ Transplantation Using the LSP Method
Jozo Dujmovic, Neil Mehta
Department of Computer Science, San Francisco State University, California, USA;
Division of Gastroenterology, University of California San Francisco School of Medicine, California, USA

09:40 - 10:00am: Designing a Decision Logic System using the OpenEHR Decision Language
Francini Hak, Tiago Guimaraes, Manuel Filipe Santos
ALGORITMI Research Centre/LASI, University of Minho,
Guimaraes, Portugal

10:00 - 10:20am: **BREAK (Refreshments)**
(LOCATION: Lotus Ballrooms 2-3)

SESSION 9A-THU: **(CONCURRENT SESSION WITH ON-SITE SESSION 13B-THU & 14B-THU & ON-LINE SESSIONS)**
COMPUTATIONAL INTELLIGENCE
https://www.american-cse.org/csci2024/RTCI
Chairs: TBA
December 12, 2024 (Thursday); 10:20am - 11:40am
(LOCATION: Ballrooms Galleria D-E)

10:20 - 10:40am: Unified Language of Operation Units for Robot-Executable Synthesis Protocols
Yun Fu, Xiwen Liu
National Science Library, Chinese Academy of Sciences,
Beijing, China;
Department of Information Resources Management, School of Economics and Management, University of Chinese Academy of Sciences,
Beijing, China

10:40 - 11:00am: ML-PCM: Machine Learning Technique for Write Optimization in Phase Change Memory (PCM)
Mahek Desai, Rowena Quinn, Marjan Asadinia
California State University, Northridge, California, USA;
Illinois Central College, Peoria, Illinois, USA

11:00 - 11:20am: What Happens When Chatbots Go Wild? An Evidence-based Typology of Emerging Risks Related to Large Language Models in Public-facing Chatbots
Jeff Stanley, Hannah Lettie
MITRE, McLean, Virginia, USA

11:20 - 11:40am: Cross-Linguistic Speech Emotion Detection Using Convolutional Neural Networks
Ulkar Mammadli, Aliya Huseynova, Laman Majid, Samir Rustamov
School of Information Technology and Engineering,
ADA University, Baku, Azerbaijan

SESSION 10A-THU: (CONCURRENT SESSION WITH ON-SITE SESSION 14B-THU & ON-LINE SESSIONS)
COMPUTATIONAL BIOLOGY &
HEALTH INFORMATICS AND MEDICAL SYSTEMS
https://www.american-cse.org/csci2024/RTHI
https://www.american-cse.org/csci2024/RTCB
Chairs: TBA
December 12, 2024 (Thursday); 11:40am - 12:20pm
(LOCATION: Ballrooms Galleria D-E)

11:40 - 12:00pm: Secure and Lightweight Data Sharing Scheme with Forward Secrecy for Cloud-Assisted Electronic Health Record Systems
Sultan Basudan, Abdulrahman Alamer, Yunus Al Qasim
Computer Science Department, Jazan University, Jazan, Saudi Arabia

12:00 - 12:20pm: Deep Learning Predicts Non-Human Primate Drinking Category from Liver Histology
Bikram Khanal, Carissa Fong, Sri Manjusha Tella, Rupak Khadka, Steven W. Gonazales, Kathleen A. Grant, Mary Lauren Benton
School of Engineering and Computer Science, Department of Computer Science, Baylor University, Waco, Texas, USA;
Division of Neuroscience, Oregon National Primate Research Center, Oregon Health and Science University, Beaverton, Oregon, USA

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

01:20 - 02:00pm: INVITED/KEYNOTE:
DATA LEAKAGE IN AI ON BIG DATA-MEDICAL IMAGING
Dr. Farid Ghareh Mohammadi
Mayo Clinic, Florida, USA
(LOCATION: Ballrooms Galleria D-E)

SESSION 11A-THU: (CONCURRENT SESSION WITH ON-SITE SESSION 15B-THU & ON-LINE SESSIONS)
MOBILE COMPUTING, WIRELESS NETWORKS, & SECURITY
https://www.american-cse.org/csci2024/RTMC
Chairs: TBA
December 12, 2024 (Thursday); 02:00pm - 03:00pm
(LOCATION: Ballrooms Galleria D-E)

02:00 - 02:20pm: A Deep Learning Based Hybrid Approach for Channel Estimation of Communication Systems
Joseph Bednar, Xiao-Hua Yu
Department of Electrical Engineering, California Polytechnic State University, San Luis Obispo, California, USA

02:20 - 02:40pm: High-Gain Two-layer Antenna Design Using Characteristic Mode Theory for Millimeter Wave Applications
Daniel Santillan, Luis Tello-Oquendo, Daniel Garcia-Tapia, and Eduardo Haro-Mendoza
College of Engineering, Universidad Nacional de Chimborazo, Riobamba, Ecuador

02:40 - 03:00pm: A Review of Fault Management Practices Adopted by Organization X in Samoa
Tara Patu Kasimani, Ioana Chan Mow
National University of Samoa, Apia, Samoa

03:00 - 03:40pm: BREAK (Refreshments) & POSTER SESSIONS
December 12, 2024 (Thursday)
(LOCATION: Lotus Ballroom 2-3)

O. Scrolling Safely: Implementing ID and Biometric Verification into Social Media
Destani B. Fountain
Department of Computer Science and Information Systems, University of North Georgia, Dahlonega, Georgia, USA

O. Internet of Fishery Things for Sustainable Fishery
Kiseon Kim
Gwangju Institute of Science and Technology (GIST), Gwangju, Korea

O. Hardware Acclerator for Real-time Image Classification
Jong-Youn Lee, Jeong-Yun Seo, Sung-Jun Park, Harim Lee, and Yong-Hwan Lee
Department of Electronic Engineering, Kumoh National Institute of Technology, Gumi, Korea;
School of Electronic Engineering, Kumoh National Institute of Technology, Gumi, Korea

O. Research on Methods of Automatic Inspection System for Inspecting Busbar
So-Young Kwon, Young-Hyung Kim, Jong-Ik Park, Hyeon-Chan Seong
Kumoh National Institute of Technology, Gumi, Korea;
Sejung Robot, Gumi, Korea;
Korea Industrial Complex Corporation, Gumi, Korea

O. Developing TRACE - Towards an Automated Emotion Detection and Reaction Tool for Media Content
Michael Roros, James Braman
Community College of Baltimore County, Baltimore. Maryland, USA

O. Illuminating Vulnerabilities - The Dark Side of Smart Bulb
Jiayong Zheng, Bryson Payne
Department of Computer Science, University of North Georgia, Dahlonega, Georgia, USA

SESSION 12A-THU: (CONCURRENT SESSION WITH ON-SITE SESSION 16B-THU & ON-LINE SESSIONS)
ARTIFICIAL INTELLIGENCE
https://www.american-cse.org/csci2024/RTAI
Chairs: TBA
December 12, 2024 (Thursday); 03:40pm - 06:00pm
(LOCATION: Ballrooms Galleria D-E)

03:40 - 04:00pm: Detection of LLM-Generated Java Code Using Discretized Nested Bigrams
Timothy Paek, Chilukuri Mohan
Syracuse University, Syracuse, New York, USA

04:00 - 04:20pm: Machine Learning Models for Skin Cancer Detection
Shakil Akhtar, Mudasser F. Wyne, Darshankumar Patel
1CS/IT Department, Clayton State University, USA;
School of Engineering and Computing, National University, USA

04:20 - 04:40pm: Efficient Inductive Logic Programming Based on Neural Network
Tomo Nakazawa, Moeko Okawara, Tsutomu Kumazawa, Yasushi Kambayashi, and Munehiro Takimoto
Department of Information Sciences, Tokyo University of Science, Noda, Japan;
Department of Informatics and Data Science, Sanyo-Onoda City University, Sanyo-Onoda, Japan;
Software Research Associates, Inc., Toshima-ku, Japan

04:40 - 05:00pm: Generating Synthetic Datasets to Improve Deep Learning Model Training
Kolten Pulliam, Terry Griffin, Catherine Stringfellow
Midwestern State University, Wichita Falls, Texas, USA

05:00 - 05:20pm: CTRQNets & LQNets: Continuous Time Recurrent and Liquid Quantum Neural Networks
Alejandro Mayorga, Alexander Yuan, Andrew Yuan, Tyler Wooldridge, and Xiaodi Wang
Western Connecticut State University, Danbury, Connecticut, USA;
New Canaan High School, New Canaan, Connecticut, USA;
Danbury Math Academy, Danbury, Connecticut, USA;
Boston University, Boston, MA, USA

05:20 - 05:40pm: FREE SLOT

05:40 - 06:00pm: FREE SLOT

07:15 - 09:15pm: CONFERENCE RECEPTION DINNER
December 12, 2024 (Thursday); 07:15pm - 09:15pm
(LOCATION: LOTUS Ballrooms)

ON-SITE PRESENTATIONS & ACTIVITIES (DECEMBER 12, Thursday)
LOCATION: Lotus Ballroom 1
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SESSION 13B-THU: (CONCURRENT SESSION WITH ON-SITE SESSION 8A-THU & ON-LINE SESSIONS)
SOFTWARE ENGINEERING
https://www.american-cse.org/csci2024/RTSE
Chairs: TBA
December 12, 2024 (Thursday); 09:00am - 10:20am
(LOCATION: Lotus Ballroom 1)

09:00 - 09:20am: Leveraging LLM to Detect and Correct Vulnerabilities in Code
Ilmaan Zia, Muhammad Abdul Basit Ur Rahim, Shahid Hussain
Department of Computer Science and Engineering, California
State University Long Beach, California, USA;
Department of Engineering and Computer Science,
Penn State University Behrend, PA, USA

09:20 - 09:40am: Towards Automated Software Testing: Evaluating LLMs in Generating
Effective Test Cases
Marcel Pehlke, Cindy Eudenbach, Maximilian Graw, Marc Jansen
University of Applied Science Ruhr West, Bottrop, Germany

09:40 - 10:00am: Architecture Technical Debt Management and Prioritization:
A Systematic Mapping Study
Lucas Graham, Dale Dzielski, Yasser Alshehri
Lane Department of Computer Science and Electrical Engineering,
West Virginia University, Morgantown, West Virginia, USA

10:00 - 10:20am: Enhancing Software Requirements Quality: Ambiguity Detection and
Resolution Using Large Language Models
Ankit Raj, Muhammad Abdul Basit Ur Rahim, Shahid Hussain
Department of Computer Science and Engineering, California State
University Long Beach, California, USA;
Department of Engineering and Computer Science,
Penn State University Behrend, PA, USA

10:20 - 10:40am: BREAK (Refreshments)
(LOCATION: Lotus Ballrooms 2-3)

SESSION 14B-THU: (CONCURRENT SESSION WITH ON-SITE SESSION 9A-THU & ON-LINE SESSIONS)
BIG DATA AND DATA SCIENCE + ARTIFICIAL INTELLIGENCE
https://www.american-cse.org/csci2024/RTBD
https://www.american-cse.org/csci2024/RTAI
Chairs: TBA
December 12, 2024 (Thursday); 10:40am - 12:20pm
(LOCATION: Lotus Ballroom 1)

10:40 - 11:00am: Indexing High-Dimensional Multi-Modal Big Data
Zohreh Safari
Department of Computer Science, Math, Engineering Technology,
Elizabeth City State University, Elizabeth City,
North Carolina, USA

11:00 - 11:20am: Predicting Late Delivery Risk in a Blockchain-based Supply Chain Management Architecture
Haydar Teymourlouei, Vareva E. Harris
Department of Technology & Security, Bowie State University,
Bowie, Maryland, USA;
College of Hospitality, Retail and Sport Management, University
of South Carolina, Columbia, South Carolina, USA

11:20 - 11:40am: Quantum Machine Learning for Heart Disease Detection: A Case Study
Sadia Nasrin Tisha, Mushfika Sharmin Rahman, Javier Orduz
University of Maryland, Baltimore County, Baltimore, Maryland, USA;
School of Engineering and Computer Science, Department of Computer
Science, Baylor University, Texas, USA;
Earlham College, Richmond, Indiana, USA

11:40 - 12:00pm: Using Clustering Methods to Enhance Data Representativeness: Toward a Well-Being Indicator for Corsican Municipalities
Ghinevra Comiti, Paul-Antoine Bisgambiglia, Nathalie Lameta,
Morgane Millet, Graziella Luisi, Paul Bisgambiglia
University of Corsica Pasquale Paoli, France

12:00 - 12:20pm: Mapping Trafficking Networks: A Data-Driven Approach to Disrupt Human Trafficking Post Russia-Ukraine Conflict
Murat Ozer, Goksel Kucukkaya, Yasin Kose, Assel Mukasheva,
and Kazim Ciris
School of Information Technology, University of Cincinnati,
Cincinnati, Ohio, USA;
Cybercrime and Forensic Computing, Friedrich-Alexander-Universitat,
Erlangen, Germany;
Information Systems, Kazakh-British Technical University,
Almaty, Kazakhstan

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

01:20 - 02:00pm: INVITED/KEYNOTE:
DATA LEAKAGE IN AI ON BIG DATA-MEDICAL IMAGING
Dr. Farid Ghareh Mohammadi
Mayo Clinic, Florida, USA
(LOCATION: Ballrooms Galleria D-E)

SESSION 15B-THU: (CONCURRENT SESSION WITH ON-SITE SESSION 11A-THU & ON-LINE SESSIONS)
COMPUTATIONAL SCIENCE
https://www.american-cse.org/csci2024/RTCS
Chairs: TBA
December 12, 2024 (Thursday); 02:00pm - 03:00pm
(LOCATION: Lotus Ballroom 1)

02:00 - 02:20pm: PENN: Predicting Errors using Neural Network in Phase Change Memory
Apoorva Rumale, Jake Ekoniak, Marjan Asadinia
California State University Northridge, California, USA;
University of California Los Angeles, California, USA

02:20 - 02:40pm: ParDcuhre: A Scalable Parallel Solution for Multivariate Integration with CUDA
Tobias Shaw, Peter Worden, Omofolakunmi Olagbemi
Computer Science Department, Hope College, Holland, Michigan, USA

02:40 - 03:00pm: Modeling and Simulation of Parallel D-STATCOMs
Connor Winnen, Jason Brinsfield, Taufik
California Polytechnic State University, San Luis Obispo, California, USA

03:00 - 03:40pm: BREAK (Refreshments) & POSTER SESSIONS
December 12, 2024 (Thursday)
(LOCATION: Lotus Ballroom 2-3)

O. Scrolling Safely: Implementing ID and Biometric Verification into Social Media
Destani B. Fountain
Department of Computer Science and Information Systems,
University of North Georgia, Dahlonega, Georgia, USA

O. Internet of Fishery Things for Sustainable Fishery
Kiseon Kim
Gwangju Institute of Science and Technology (GIST),
Gwangju, Korea

O. Hardware Acclerator for Real-time Image Classification
Jong-Youn Lee, Jeong-Yun Seo, Sung-Jun Park, Harim Lee, and Yong-Hwan Lee
Department of Electronic Engineering, Kumoh National Institute of Technology, Gumi, Korea;
School of Electronic Engineering, Kumoh National Institute of Technology, Gumi, Korea

O. Research on Methods of Automatic Inspection System for Inspecting Busbar
So-Young Kwon, Young-Hyung Kim, Jong-Ik Park, Hyeon-Chan Seong
Kumoh National Institute of Technology, Gumi, Korea;
Sejung Robot, Gumi, Korea;
Korea Industrial Complex Corporation, Gumi, Korea

O. Developing TRACE - Towards an Automated Emotion Detection and Reaction Tool for Media Content
Michael Roros, James Braman
Community College of Baltimore County, Baltimore. Maryland, USA

O. Illuminating Vulnerabilities - The Dark Side of Smart Bulb
Jiayong Zheng, Bryson Payne
Department of Computer Science, University of North Georgia,
Dahlonega, Georgia, USA

SESSION 16B-THU: (CONCURRENT SESSION WITH ON-SITE SESSION 12A-THU & ON-LINE SESSIONS)
CYBER WARFARE, CYBER DEFENSE, & CYBER SECURITY +
EDUCATION IN THE CONTEXT OF SECURITY - CS & CE
https://www.american-cse.org/csci2024/RTCW
https://www.american-cse.org/csci2024/RTED
Chairs: TBA
December 12, 2024 (Thursday); 03:40pm - 05:40pm
(LOCATION: Lotus Ballroom 1)

03:40 - 04:00pm: Integrating Graph Theoretical Approaches in Cybersecurity Education
Goksel Kucukkaya, Murat Ozer, Kazim Ciris
School of Information Technology, University of Cincinnati,
Cincinnati, Ohio, USA

04:00 - 04:20pm: Categorizing Anomalies for Cybersecurity Risk
Goksel Kucukkaya, Murat Ozer
School of Information Technology, University of Cincinnati,
Cincinnati, Ohio, USA

04:20 - 04:40pm: Counterterrorism Planning by Multi-Objective Multi-Agent
Reinforcement Learning
Steven Prestwich, Vedat Dogan, Barry O'Sullivan
Insight SFI Research Centre for Data Analytics, School of
Computer Science & IT, University College Cork, Ireland

04:40 - 05:00pm: A Graph Neural Network-based Role Classification in
Criminal Networks
Vedat Dogan, Steven Prestwich, Barry O'Sullivan
Insight SFI Research Centre for Data Analytics, School of
Computer Science & IT, University College Cork, Ireland

05:00 - 05:20pm: Building a Data-Driven Cybersecurity Lab: A Practical Framework
for AI-Powered Threat Detection
Goksel Kucukkaya, Murat Ozer
School of Information Technology, University of Cincinnati,
Cincinnati, Ohio, USA

05:20 - 05:40pm: Mathematical Foundations for Modern Cryptography in the Quantum Era
Javier Orduz
Earlham College, Richmond, Indiana, USA

05:40 - 06:00pm: FREE SLOT

07:15 - 09:15pm: CONFERENCE RECEPTION DINNER
December 12, 2024 (Thursday); 07:15pm - 09:15pm
(LOCATION: LOTUS Ballrooms)

ON-LINE PRESENTATIONS (DECEMBER 12 - Thursday)

PLEASE NOTE THAT ALL DATES AND TIMES MENTIONED IN THIS DOCUMENT ARE IN TERMS OF LAS VEGAS TIME-ZONE (USA Pacific Time-zone).

The conference has 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 possible, speakers are expected to connect at the beginning 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. 11-13, 2024), please contact csci.zoom@gmail.com

SESSION 5-ONLINE: INTERNET OF THINGS & INTERNET OF EVERYTHING (RTOT) + CLOUD COMPUTING AND DATA CENTERS (RTCC)

https://www.american-cse.org/csci2024/RTOT
https://www.american-cse.org/csci2024/RTCC
December 12, 2024 (Thursday); 08:00am - 10:20am
(ONLINE - ZOOM)

08:00 - 08:20am: Managing HPC Cluster for Research and Teaching Workload
Mohamed Khalefa, Shebuti Rayana, Kinning Poon,
Christos Noutsos, Renu Balyan
SUNY at Old Westbury, Old Westbury, New York, USA

08:20 - 08:40am: Navigating Cloud Security Challenges: Insights and Solutions
Tathagata Bhattacharya, Xiaopu Peng, Amit Das, Ting Cao,
Preet Patel, Juhi Prajapati, Vipul Patel, Giovanni Bellio,
Xiao Qin, Sai Teja Veeramalla, Yongxin Liu
Auburn University at Montgomery, Montgomery, Alabama, USA;
Talladega Collge, Talladega, Alabama, USA;
University of North Alabama, Florence, Alabama, USA;
Utah Valley University, Orem, Utah, USA;
Embry-Riddle Aeronautical University, Daytona Beach, Florida, USA;
Shelby Center for Engineering Technology, Samuel Ginn College
of Engineering, Auburn University, Alabama, USA

08:40 - 09:00am: A Solution for Public Cloud Accessibility from Private Networks
Louise Jia-Lu Chen, Quincy Wu, Yu-Min Wang
National Chi Nan University, Puli Township, Taiwan;
Juniper Networks, Taipei City, Taiwan

09:00 - 09:20am: Efficient Container Checkpointing and Migration in a Decentralized Edge Orchestration System
Bartu Ince, Arda Yurdakul
Computer Engineering Department, Bogazici University,
Istanbul, Turkey

09:20 - 09:40am: Security of IoT Devices and Networks: Approaches, Key Challenges and Future Research Trends
Ranim Chalabi, Layan Alhamad, Nagham Naseb, Hayam Itani,
Ahmad Sawalmeh, Muhammad Umair Khan
College of Engineering, Alfaisal University, Riyadh, Saudi Arabia;
Department of Robotics and Artificial Intelligence, Faculty
of Information Technology, Jadara University, Irbid, Jordan

09:40 - 10:00am: Large-Scale Application of Innovative IoT Enabled Falsework Monitoring System in a Dynamic Public Works Construction Site
R.C.Y. Lam, J.K.C. Lee, J.B. Cheung, L.C.H. Lam, J.K.H. Chu
Department of Civil Engineering, Hong Kong Chu Hai College,
Hong Kong, China;
Civil Engineering and Development Department, Hong Kong, China;
LR Construction Technologies Limited, Hong Kong, China;
AECOM Asia Company Ltd., Hong Kong, China

10:00 - 10:20am: Enhancing IoT Security with EAP-PWD: A Resource-Efficient Authentication Solution for Manufacturer Usage Description (MUD)-Based Environments
Abhiroop Yerramilli, Darshana Upadhyay, Srini Sampalli
Faculty of Computer Science, Dalhousie University,
Halifax, NS, Canada

December 12

SESSION 6-ONLINE: ARTIFICIAL INTELLIGENCE (RTAI) + SOFTWARE ENGINEERING (RTSE) + HEALTH INFORMATICS AND MEDICAL SYSTEMS (RTHI)
https://www.american-cse.org/csci2024/RTAI
https://www.american-cse.org/csci2024/RTHI
https://www.american-cse.org/csci2024/RTSE
December 12, 2024 (Thursday); 10:20am - 01:00pm
(ONLINE - ZOOM)

10:20 - 10:40am: Unveiling the Unexpected: Transformer Outperforms Specialized Architectures in Volatile Supply Chain Forecasting
Beilei Zhu, Li Fan
Intel Corp. Hillsboro, Oregon, USA

10:40 - 11:00am: Understanding Risks for Maternal Mortality in Rural Bangladesh Using XGBoost, Random Forest, and Decision Tree ML Models
Temitope Oladimeji, Cristina Hava Muntean, Anderson Simiscuka
National College of Ireland, Dublin City University, Ireland

11:00 - 11:20am: Performance Comparison of High Accuracy CNNs for Brain Tumor Detection Using Transfer Learning
Gunjan Jha, Anshul Jha, Eugene B. John
The University of Texas at San Antonio, San Antonio, Texas, USA

11:20 - 11:40am: TruDevOps: Towards Pairing Agile Software Development Curriculum with AI-Agile DevOps
Chen-Yeou Yu, Paige Su, Wensheng Zhang
Department of Computer and Data Science, Truman State University, Kirksville, MO, USA;
Department of Computer Science, Iowa State University, Ames, Iowa, USA

11:40 - 12:00pm: Extractive Text Summarization for Azerbaijani Language
Mir Amir Pashayev
ADA University, Baku, Azerbaijan;
The George Washington University, Washington, D.C., USA

12:00 - 12:20pm: An MCDA and PERT Based Novel Approach for Prioritization of User Stories in Agile Environment
Shreeram Hudda, Rishabh Barnwal, Tanupriya Chejara, and Abhishek Khurana
SDN Lab, Department of Computer Science and Information Systems, Birla Institute of Technology and Science - Pilani (BITS-Pilani), Pilani Campus, Rajasthan, India

12:20 - 12:40pm: Performance Analysis in Alzheimer's Disease Diagnosis with Machine Learning Methods
Fuat Turk, Nuri Alper Metin, Murat Luy
Kirikkale University, Faculty of Engineering and Natural Sciences, Computer Engineering, Kirikkale, Turkey;
Kirikkale University, Kirikkale Vocational School, Electronic Communication Program, Kirikkale, Turkey

12:40 - 01:00pm: Building a Compact Workflow Management System
Hanh Pham, Alex Carlson, Daniel Mangoianu, Dillon Cooke, Rodolfo J. M. Leal, Scott Klein, John Haring, Salvador C. Nava, Thatcher Deyoe, Thomas Palotta, Joseph Arias, Angel Flores
State University Of New York at New Paltz, New York, USA

SESSION 7-ONLINE: ARTIFICIAL INTELLIGENCE (RTAI)
https://www.american-cse.org/csci2024/RTAI
December 12, 2024 (Thursday); 01:00pm - 04:00pm
(ONLINE - ZOOM)

01:00 - 01:20pm: Application of Human Centered Reinforcement Learning to Develop an Air Battle Management Operator Digital Twin
Courtney L. Crooks, Jasmine Mckellar-Davidson, Vincent Davidson, Patrick Tyne, Kathleen Wills, Peter Lebedev, Tyler Rowe, Eric Tang, Jessica Inman
Georgia Tech Research Institute, Georgia, USA

01:20 - 01:40pm:

01:40 - 02:00pm: Domestic Abuse Survivor Assistance Through Forecasting and Engagement with Artificial Intelligence Solutions
Sneha Talwalkar, Courtney L. Crooks
University of Toronto, Faculty of Information, Toronto, Canada;
Georgia Institute of Technology, School of Cybersecurity and Privacy, Atlanta, USA;
Emory University, School of Medicine, Atlanta, USA

02:00 - 02:20pm: Effectiveness of Term Frequency-Inverse Graph Frequency (TF-IGF) Technique Against Various Cyber Attacks
Prabin B. Lamichhane, Jacob Taylor, William Eberle
Tennessee Tech University, Cookeville, Tennessee, USA;
West Virginia University, Morgantown, West Virginia, USA

02:20 - 02:40pm: Revolutionizing Multi-Agent Systems: The Role of Agentic RAG in Dynamic Data Ingestion and Real-Time Reasoning
Ekpe Okorafor, Ignace Djitog, Patrick Udechukwu, Emmanuel Aburuotu, Kinglsey Igulu, Pascal Nwankwo, Allwell Akanwa
Center for Advanced AI, Accenture Data & AI, USA;
Department of Computer Science, Nigerian British University, Asa, Nigeria

02:40 - 03:00pm: Preferential Ensemble Method with Exponentially Weighted Scores and its Application to Facial Expression Classification
Lifeng Ni, Sung-Hyuk Cha
Computer Science Department, Pace University, New York, USA;
Computer Science, Essex County College, Newark, New Jersey, USA

03:00 - 03:20pm: Improving SOCIALDISTILBERT with Augmented Embeddings
Michael Abobor, Darsana P. Josyula
Department of Computer Science, Bowie State University, Bowie, Maryland, USA

03:20 - 03:40pm: Development of a User-Oriented Musical Composition Generation Tool Utilizing Machine Learning
Benjamin Gelineau, Ali Al-Faris
Computer Science, Worcester State University, Worcester, MA, USA

03:40 - 04:00pm: Early Detection of Mode Collapse in GANs Through Loss Monitoring
Farhat Lamia Barsha, William F. Eberle
Department of Computer Science, Tennessee Technological University, Tennessee, USA

SESSION 8-ONLINE: ARTIFICIAL INTELLIGENCE (RTAI) + BIG DATA AND DATA SCIENCE (RTBD)
https://www.american-cse.org/csci2024/RTAI
https://www.american-cse.org/csci2024/RTBD
December 12, 2024 (Thursday); 04:00pm - 06:00pm
(ONLINE - ZOOM)

04:00 - 04:20pm: Tracing the Spread of COVID-19: Analyzing Daily Time Series Data for New Cases in the Kanto Region of Japan
Sosuke Yagishita, Nan Yagishita-Kyo, Fengqi Fang, Koki Kyo, and Hideo Noda
National Institute of Technology, Kisarazu College, Chiba, Japan;
Faculty of Medicine, Saitama Medical University, Saitama, Japan;
Graduate School of Management, Tokyo University of Science, Tokyo, Japan;
Digital Transformation Center, Gifu Shotoku Gakuen University, Gifu, Japan;
Department of Business Economics, School of Management, Tokyo University of Science, Tokyo, Japan

04:20 - 04:40pm: WPedRVFL Network With Double Regularization
Qiushi Shi
Nanyang Technological University, Singapore

04:40 - 05:00pm: Research on Estimation Algorithm of Track Irregularity of Heavy-haul Railway based on Vehicle Dynamic Response
Zhiming Xiao, Yuqiang He, Pengyi Hao
CHN ENERGY Shuozhou-Huanghua Railway Development Co., Ltd., Cangzhou, Hebei, China;
School of Mechanical, Electronic and Control Engineering, Beijing Jiaotong University, Beijing, China

05:00 - 05:20pm: Stock Price Forecasting: A Comparative Analysis of Time Series and Machine Learning Models
Imen Ferjani, Fatma Mallouli, Imen Gmach, Nada Chaabane, Houda Chammakhi, Mejda Dakhlaoui, Hana Faltakh
Computer Department, Deanship of Preparatory Year and Supporting Studies, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia;
The Applied College, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia;
Department of Quantitative Methods, College of Business Administration, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia;
Department of Basic Sciences, Deanship of Preparatory Year and Supporting Studies, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia

05:20 - 05:40pm: Integrating Generative AI and Foundational Skills for Investment and Financial Decision-Making
Shanzhen Gao, Weizheng Gao
Department of Computer Information Systems, Reginald F Lewis College of Business, Virginia State University, Petersburg, Virginia, USA;
Department of Mathematics, Computer Science and Engineering Technology, Elizabeth City State University, Elizabeth City, North Carolina, USA

05:40 - 06:00pm: Optimization of Employee Performance Management through Data Mining and Automated Classification Models in Public Sector Environment
Francisco Liut, Alexandra Gonzalez-Eras
Universidad Tecnica Particular de Loja, Ecuador

DECEMBER 13, 2024

THERE ARE THREE SETS OF CONCURRENT SESSIONS ON December 13, 2024; TWO are ON-SITE PRESENTATIONS (FACE-TO-FACE) IN BALLROOMS GALLERIA D-E AND Lotus Ballroom 1 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)

07:20 - 08-20am: CONTINENTAL BREAKFAST
(LOCATION: Lotus Ballrooms 2-3)

ON-SITE PRESENTATIONS & ACTIVITIES (DECEMBER 13, Friday)
LOCATION: Ballrooms Galleria D-E
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SESSION 17A-FRI: (CONCURRENT SESSION WITH ON-SITE SESSION 22B-FRI & ON-LINE SESSIONS)
ARTIFICIAL INTELLIGENCE + BIG DATA AND DATA SCIENCE + COMPUTATIONAL BIOLOGY
https://www.american-cse.org/csci2024/RTAI
https://www.american-cse.org/csci2024/RTBD
https://www.american-cse.org/csci2024/RTCB
Chairs: TBA
December 13, 2024 (Friday); 08:20am - 10:00am
(LOCATION: Ballrooms Galleria D-E)

08:20 - 08:40am: On the Effectiveness of UAV Audio Detection and Identification Using Deep Learning Models and Mel Spectrograms
Ravi Gadgil, Helen Lei, Sandeep Amgothu, Dulal Kar
Department of Computer Science, San Jose State University,
San Jose, California, USA;
College of Computing and Information Science, Cornell University,
Ithaca, New York, USA;
Department of Computing Sciences,
Texas A&M University-Corpus Christi, Corpus Christi, Texas, USA

08:40 - 09:00am: Systems Dynamics Aware Neural Networks
Sakir Yucel
Wexford, PA, USA

09:00 - 09:20am: Detecting Airport Smugglers Using Machine Learning Techniques
Ciera Miller, Cheryl Hinds
Norolk State University, Norfolk, Virginia, USA

09:20 - 09:40am: Novel Protein Structure Validation using PDBMine and Data Analytics Approaches
Niharika Pandala, Katherine G. Brown, Homayoun Valafar
University of Texas at Dallas, Richardson, Texas, USA;
University of South Carolina, Columbia, South Carolina, USA

09:40 - 10:00am: Identifying Fake News using a Recurrent Neural Network
Trenton Ward, Cheryl Hinds
Department of Computer Science, Norfolk State University,
Norfolk, Virginia, USA

10:00 - 10:20am: BREAK (Refreshments)
(LOCATION: Lotus Ballrooms 2-3)

SESSION 18A-FRI: (CONCURRENT SESSION WITH ON-SITE SESSION 23B-FRI & ON-LINE SESSIONS)
INTERNET OF THINGS & INTERNET OF EVERYTHING
https://www.american-cse.org/csci2024/RTOT
Chairs: TBA
December 13, 2024 (Friday); 10:20am - 11:20am
(LOCATION: Ballrooms Galleria D-E)

10:20 - 10:40am: Automated Detection of Fraudulent Returns in E-Commerce: A Machine Learning and Blockchain Approach
Venkat Sairam Ravala, Marjan Asadinia
California State University, Northridge, California, USA

10:40 - 11:00am: Reducing Underwater Observation Costs by Leveraging Cloud Technology
Thomas Ederer, Wolfgang Slany, Igor Ivkic
University of Applied Sciences Burgenland, Eisenstadt, Austria;
Lancaster University, Lancaster, UK;
Graz University of Technology, Graz, Austria

11:00 - 11:20am: Cyber Value at Risk Model for IoT Ecosystems
Goksel Kucukkaya, Murat Ozer
School of Information Technology, University of Cincinnati, Cincinnati, Ohio, USA

SESSION 19A-FRI: (CONCURRENT SESSION WITH ON-SITE SESSION 23B-FRI & ON-LINE SESSIONS)
EDUCATION - CS & CE
https://www.american-cse.org/csci2024/RTED
Chairs: TBA
December 13, 2024 (Friday); 11:20am - 12:20pm
(LOCATION: Ballrooms Galleria D-E)

11:20 - 11:40am: Creating Better Group Projects in Higher Education
Shannon Beasley, S. C. Spangler
Middle Georgia State University, Georgia, USA

11:40 - 12:00pm: A Review of Generative AI in Computer Science Education: Challenges and Opportunities in Accuracy, Authenticity, and Assessment
Iman Reihanian, Yunfei Hou, Yu Chen, Yi Zhang
School of Computer Science and Engineering, California State University, San Bernardino, California, USA;
School of Information Systems and Technology, San Jose State University, California, USA;
University of California, San Diego, California, USA

12:00 - 12:20pm: The Effectiveness of the Project-Based Learning in the Perfume Chemistry Course
Chanyapat Sangsuwon, Shutchapol Chopvitayakun, Nuntaporn Aukkanit, Supatchalee Sirichokworrakit, Kunyanuth Kularbphettong
Faculty of Science and Technology, Suan Sunandha Rajabhat University, Bangkok, Thailand

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

SESSION 20A-FRI: (CONCURRENT SESSION WITH ON-SITE SESSION 23B-FRI & ON-LINE SESSIONS)
ARTIFICIAL INTELLIGENCE + COMPUTATIONAL SCIENCE
https://www.american-cse.org/csci2024/RTAI
https://www.american-cse.org/csci2024/RTCS
Chairs: TBA
December 13, 2024 (Friday); 01:20pm - 03:00pm
(LOCATION: Ballrooms Galleria D-E)

01:20 - 01:40pm: Genetic Algorithm Visualization
Dwight Deugo
The School of Computer Science, Carleton University, Ottawa, Canada

01:40 - 02:00pm: Multi-grain Parallel Processing of Intuctive Logic Programming
Moeko Okawara, Munehiro Takimoto
Department of Informatioin Sciences, Tokyo University of Science, Noda, Japan

02:00 - 02:20pm: Handling Anomalies in CAD Assemblies: Detecting Anomalous and Suggesting Alternative Parts
Carola Lenzen, Vinzenz Loffel, Wolfgang Reif
Institute for Software & Systems Engineering,
University of Augsburg, Augsburg, Germany

02:20 - 02:40pm: A Study on Contrastive Graph Neural Network Pretraining for Predicting Transcriptome Profiles
Jiaji Ma, Scott Auerbach, Guojing Cong
University of Michigan, Michigan, USA;
National Institute of Environmental Health Sciences, USA;
Oak Ridge National Laboratory, USA

02:40 - 03:00pm: OptiBench: An Optimization Benchmark Tool for Renewable Energy Problems
Harsh Gangwar, Kinshuk Panda, Bernard Knueven, Juliane Mueller
National Renewable Energy Laboratory, Golden, Colorado, USA

03:00 - 03:20pm: BREAK (Refreshments) & POSTER SESSIONS
(LOCATION: Lotus Ballroom 2-3)

SESSION 21A-FRI: (CONCURRENT SESSION WITH ON-LINE SESSIONS)
PARALLEL & DISTRIBUTED COMPUTING + HPC
https://www.american-cse.org/csci2024/RTPD
Chairs: TBA
December 13, 2024 (Friday); 03:40pm - 05:20pm
(LOCATION: Ballrooms Galleria D-E)

03:20 - 03:40pm: Parallel Priority Queues for Soft-Sphere Collision Handling
Mark C. Lewis, J. D. McMahon, Lisa L. Lacher, Amanda A. Sickafoose
Planetary Science Institute, Tucson, Arizona, USA;
Trinity University, San Antonio, Texas, USA;
University of Houston Clear Lake, Clear Lake, Texas, USA

03:40 - 04:00pm: Analysis and Simulation of Multidimensional Interconnection Networks with Virtual-Cut-Through Routing
Benjamin Ehrlich, Yelena Rykalova, Lev B. Levitin
Boston University, Boston, Massachusetts, USA;
University of Massachusetts Lowell, Lowell, Massachusetts, USA

04:00 - 04:20pm: FREE SLOT

04:20 - 04:40pm: Performance Evaluation of HPC Workloads through Containerization with Singularity
Hari Teja Jajula, Purushotham V. Bangalore
Department of Computer Science, The University of Alabama, Tuscaloosa, Alabama, USA

04:40 - 05:00pm: Enhancing Efficiency in Statistical Modeling of Wildfire Aerosols: A Heterogeneous Approach with R and GPU Acceleration
Shahrin Shahpar, Guanzhou Wei, Yaqian He, Miaoqing Huang
Department of Electrical Engineering and Computer Science, University of Arkansas, Arkansas, USA;
Department of Industrial and Systems Engineering, Georgia Institute of Technology, Georgia, USA;
Department of Geosciences, University of Arkansas, Arkansas, USA

05:00 - 05:20pm: CLOSING REMARKS
(LOCATION: Ballrooms Galleria D-E)

DECEMBER 13, 2024

THERE ARE THREE SETS OF CONCURRENT SESSIONS ON December 13, 2024; TWO are ON-SITE PRESENTATIONS (FACE-TO-FACE) IN BALLROOMS GALLERIA D-E AND Lotus Ballroom 1 AND THE THIRD IS ONLINE (THE ZOOM LINKS are ALREADY PROVIDED TO SPEAKERS AND ALL REGISTERED AUTHORS).

7:00am - 4:00pm: **REGISTRATION**
(LOCATION: Lotus Ballrooms 2-3)

07:20 - 08-20am: **CONTINENTAL BREAKFAST**
(LOCATION: Lotus Ballrooms 2-3)

ON-SITE PRESENTATIONS & ACTIVITIES (DECEMBER 13, Friday)

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SESSION 22B-FRI: **(CONCURRENT SESSION WITH ON-SITE SESSION 17A-FRI & ON-LINE SESSIONS)**
COMPUTATIONAL SCIENCE + COMPUTATIONAL BIOLOGY +
BIG DATA AND DATA SCIENCE
https://www.american-cse.org/csci2024/RTCS
https://www.american-cse.org/csci2024/RTCB
https://www.american-cse.org/csci2024/RTBD
Chairs: Dr. Raghvendra Mall;
Biotech Research Center,TII - ATRC, Masdar City, Abu Dhabi, UAE
December 13, 2024 (Friday); 08:20am - 10:00am
(LOCATION: Lotus Ballroom 1)

08:20 - 08:40am: An Exploratory Factor Analysis of Thai Consumers' Attitudes Toward Plant-Based Protein
Supatchalee Sirichokworrakit, Nuntaporn Aukkanit,
Shutchapol Chopvitayakun, Jaruwan Chutrtong, Chanyapat Sangsuwan,
and Kunyanuth Kularbphettong
Faculty of Science and Technology,
Suan Sunandha Rajabhat University, Bangkok, Thailand

08:40 - 09:00am: A New Model for Symbolic Computation of Inverse Laplace Transforms
Jun Zhang, Willie Brown, Fangyang Shen
Department of Computer Science and Engineering Technology,
University of Maryland Eastern Shore, Maryland, USA;
Department of Engineering and Aviation Sciences, University of Maryland Eastern Shore, Maryland, USA;
Department of Computer Systems Technology, New York City College of Technology, City University of New York, Brooklyn, New York, USA

09:00 - 09:20am: Detection of DICER1 Mutation at an Early Stage Using UniCNN Model
Sahar Almenwer, Hoda El-Sayed, Md Kamruzzaman Sarker
Bowie State University, Bowie, Maryland, USA

09:20 - 09:40am: Parameter Efficient Fine-tuned Language Models for Peptide-HLA Interaction Prediction
Hamda Alhosani, Raghvendra Mall, Ankita Singh, Filippo Castiglione
Biotechnology Research Center, Technology Innovation Institute,
Abu Dhabi, United Arab Emirtates(UAE);
Institute for Applied Computing, National Research Council of Italy, Rome, Italy

09:40 - 10:00am: Online Purchasing in Nigeria: A Study on Privacy, Trust, and Behavioral Control
David Ang, Onome Edo, Suresh Guguloth
Auburn University Montgomery, Montgomery, Alabama, USA;
Faulkner University, Montgomery, Alabama, USA

10:00 - 10:20am: BREAK (Refreshments)
(LOCATION: Lotus Ballrooms 2-3)

SESSION 23B-FRI: (CONCURRENT SESSION WITH ON-SITE SESSION 18A-FRI & 19A-FRI & ON-LINE SESSIONS)
CYBER WARFARE, CYBER DEFENSE, & CYBER SECURITY +
INTERNET OF THINGS & INTERNET OF EVERYTHING +
ARTIFICIAL INTELLIGENCE + EDUCATION - CS & CE
https://www.american-cse.org/csci2024/RTCW
https://www.american-cse.org/csci2024/RTOT
https://www.american-cse.org/csci2024/RTAI
https://www.american-cse.org/csci2024/RTED
Chairs: TBA
December 13, 2024 (Friday); 10:20am - 01:00pm
(LOCATION: Lotus Ballroom 1)

10:20 - 10:40am: Psychological Warfare in the Digital Age: Using Health Misinformation as a Cyber Weapon
Dominic Etli, Noel True
Mission Support and Test Services, Purdue Global University, Las Vegas, Nevada, USA;
Purdue Global University, Longmont, Colorado, USA

10:40 - 11:00am: Leveraging Artificial Immune Systems for Semi-Supervised Intrusion Detection
William Anderson, Jesse Ables, Sudip Mittal, Shahram Rahimi, Ioana Banicescu, Thomas Arnold, Joshua Church, Joseph Jabour
Department of Computer Science & Engineering, Mississippi State University, Mississippi, USA;
University of South Alabama, Alabama, USA;
U.S Army Engineer Research and Development Center, USA

11:00 - 11:20am: War Machines of Tomorrow: Accountability and Oversight in the Age of Lethal Autonomous Weapon Systems
James O. Booker
University of North Georgia, Dahlonega, Georgia, USA

11:20 - 11:40am: Age of Information in Cyber-Physical Systems with Cellular IoT Connectivity
Luis Tello-Oquendo, Ericka Oyague, Vicent Pla, Jose-Ramon Vidal, Davinia Sanchez-Macias, Luis Guijarro
College of Engineering, Universidad Nacional de Chimborazo, Riobamba, Ecuador;
Department of Communications, Universitat Politecnica de Valencia, Valencia, Spain;
College of Industrial Engineering, Universidad de Guayaquil, Guayaquil, Ecuador

11:40 - 12:00pm: Comparative Analysis of DTLS 1.2 and 1.3 Performance for Security in IoT Environments
Karol Rzepka, Lukasz Pietraszek, Krzysztof Cabaj, Natan Orzechowski
Warsaw University of Technology, Warsaw, Poland

12:00 - 12:20pm: Robots Playing Fair? - How Embodiment Shapes Trust and Perceptions of Cheating in AI
Mriganka Biswas, John Murray
Faculty of Technology, University of Sunderland, Sunderland, UK

12:20 - 12:40pm: Improving the Effectiveness of Undergraduate Students' Core Competencies Using the Google Classroom
Jaruwan Chutrtong, Kunyanuth Kularbphettong
Suan Sunandha Rajabhat University, Bangkok, Thailand

12:40 - 01:00pm: Problem-Solving Using Logic and Reasoning, Mathematics, Algorithms, Python, and Generative AI: Part Three
Shanzhen Gao, Leah Hall, Aurelia M. Donald, Joshua Nyantakyi, Jianning Su, Weizheng Gao, Julian Allagan
Reginald F Lewis College of Business, Virginia State University, Petersburg, Virginia, USA;
Department of Mathematics, Computer Science and Engineering, Perimeter College, Georgia State University, Atlanta, Georgia, USA;
Department of Mathematics, Computer Science and Engineering Technology, Elizabeth City State University, Elizabeth City, North Carolina, USA

01:00 - 02:00pm: LUNCH (On Your Own)

02:00 - 02:20pm: FREE SLOT

02:20 - 02:40pm: FREE SLOT

02:40 - 03:00pm: FREE SLOT

03:00 - 03:20pm: BREAK (Refreshments) & POSTER SESSIONS
(LOCATION: Lotus Ballroom 2-3)

03:20 - 03:40pm: FREE SLOT

03:40 - 04:00pm: FREE SLOT

04:00 - 04:20pm: FREE SLOT

04:20 - 04:40pm: FREE SLOT

04:40 - 05:00pm: FREE SLOT

05:00 - 05:20pm: CLOSING REMARKS (GO TO Ballrooms Galleria D-E)
(LOCATION: Ballrooms Galleria D-E)

ON-LINE PRESENTATIONS (DECEMBER 13 - Friday)
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PLEASE NOTE THAT ALL DATES AND TIMES MENTIONED IN THIS DOCUMENT ARE IN TERMS OF LAS VEGAS TIME-ZONE (USA Pacific Time-zone).

The conference has 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 possible, speakers are expected to connect at the beginning 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. 11-13, 2024), please contact csci.zoom@gmail.com

SESSION 9-ONLINE: GENERAL: COMPUTATIONAL SCIENCE (RTCS) + COMPUTATIONAL INTELLIGENCE (RTCI) + COMPUTATIONAL BIOLOGY (RTCB) + ARTIFICIAL INTELLIGENCE (RTAI) + SOCIAL NETWORK ANALYSIS (RTNA) + SECURITY (RTCW) + SMART CITIES & MOBILITY (RTSC)
https://www.american-cse.org/csci2024/
December 13, 2024 (Friday); 08:00am - 11:00am
(ONLINE - ZOOM)

08:00 - 08:20am: Exploring New Methods of Data Augmentation for Intent Classification through Large Language Models
Natalia Madrueno, Alberto Fernandez-Isabel, Ruben R. Fernandez, Isaac Martin de Diego, Gonzalo Polo Vera
Department of Computing, Rey Juan Carlos University, Mostoles, Madrid, Spain;
VoxSmart Trading S.L., Madrid, Spain

08:20 - 08:40am: Influence Maximization in Dynamic Social Networks by Probing Communities
Gkolfo I. Smani, Vasileios Megalooikonomou
Department of Computer Engineering and Informatics, University of Patras, Patras, Greece

08:40 - 09:00am: Humanizing AI - Enhancing User Engagement in Health Solutions with Personality-Driven AI Design
Bharath Sudharsan, Paul Waxman
Amalgam Rx, Wilmington, DE, USA

09:00 - 09:20am: Efficiency Variations of Solution Encodings and Neighborhood Operators with Different Metaheuristics for the Job-shop Scheduling Problem
Karla Breschi Jimenez Ramirez, Julien Bernard, Herve Manier, and Marie-Ange Manier
Universite de Franche-Comte, CNRS, FEMTO-ST, Besancon, France;
UTBM, CNRS, FEMTO-ST, Belfort, France

09:20 - 09:40am: A New Technique Integrating Adam Optimizer and Q-Learning Algorithm for Adaptive Neurofeedback Therapy
Abdullatif Baba
Kuwait College of Science and Technology, Computer Science and Engineering Department, Kuwait;
University of Turkish Aeronautical Association, Computer Engineering Department, Ankara, Turkey

09:40 - 10:00am: Fostering Intermodal Logistic through Digital Entities - An Approach to Mitigate Individual Logistics by Leveraging Smart Cyber-Physical Systems
Marit Briechle-Mathiszig, Mohammed Fahad Ali,
Dominique Briechle, and Andreas Rausch
Institute for Software and Systems Engineering,
Clausthal University of Technology, Lower Saxony, Germany

10:00 - 10:20am: Efficacy of Large Language Models in Mapping Information Security Requirements: A Data-Centric View
Stefan Hirschmeier, Markus Hirschmeier, Andreas Giersch
University of Cologne, Cologne, Germany;
xPolicy Research, Nideggen, Germany

10:20 - 10:40am: Edge Computing Networks by using WSNs with Efficient Distributed Leader Election to Measure Air Pollution
Sergio Medina, Christian Fernandez-Campusano,
Leonardo Espinosa-Leal, Michael Miranda-Sandova, Claudia Duran
Department of Electrical Engineering, University of Santiago of Chile (USACH), Santiago, Chile;
Graduate School and Research, Arcada University of Applied Sciences, Helsinki, Finland;
Department of Mechanical Engineering, University of Santiago of Chile (USACH), Santiago, Chile;
Departamento de Ingenieria Industrial, Universidad Tecnologica Metropolitana, Santiago, Chile

10:40 - 11:00am: DiffNMR: Advancing Inpainting of Randomly Sampled Nuclear Magnetic Resonance Signals
Sen Yan, Fabrizio Gabellieri, Etienne Goffinet,
Filippo Castiglione, Thomas Launey
Biotechnology Research Center, Technology Innovation Institute,
Abu Dhabi, United Arab Emirtates (UAE)

SESSION 10-ONLINE: SMART CITIES AND SMART MOBILITY (RTSC) + BIG DATA AND DATA SCIENCE (RTBD) + SOCIAL NETWORK ANALYSIS, SOCIAL MEDIA, & MINING (RTNA)

https://www.american-cse.org/csci2024/RTSC
https://www.american-cse.org/csci2024/RTBD
https://www.american-cse.org/csci2024/RTNA
December 13, 2024 (Friday); 11:00am - 01:20pm
(ONLINE - ZOOM)

11:00 - 11:20am: An Investigation of the Relationship Between Expected Inflation and the Actual Inflation Using Historical Financial Indices
Ray R. Hashemi, Omid M. Ardakani, Brandon Miller, and Azita G. Bahrami
Department of Computer Science, Georgia Southern University, Savannah, Georgia, USA;
Department of Economics, Georgia Southern University, Savannah, Georgia, USA; IT Consultation, Savannah, Georgia, USA

11:20 - 11:40am: Using Wrist-Worn Accelerometer to Detect Off-Task Activities While Studying Or Working
Andrey Mosin, Cheol-Hong Min, Hassan Salamy
Electrical and Computer Engineering, University of St. Thomas, St. Paul, MN, USA

11:40 - 12:00pm: A Smart City Development and Deployment Platform using a High-Performance 5G/6G System
Jeffrey Wallace, Angelica Wallace, Miroslav Vukovic, Toni Karimovic, and William Edwards
Rocket Technology Systems LLC, Washington, DC, USA;
RF Researcher, Bend, Oregon, USA

12:00 - 12:20pm: FREE SLOT

12:20 - 12:40pm: Ganga: A Smart Bag Tracking System With Theft Protection
Tathagata Bhattacharya, Vinod Alabana, Nithin Vudayagiri, and Amit Das
Auburn University at Montgomery, Alabama, USA;
University of North Alabama, Alabama

12:40 - 01:00pm: Simulating Data Patterns Produced by Dynamic IoT Environments
Mikhail Genkin, Parisa Azizian, Nasim Dadgar, Junhao Hu
Trent University, Peterborough, Ontario, Canada

01:00 - 01:20pm: A Fused Siamese Network for Fake Review Detection
Sankarshan Dasgupta, James Buckley
University of Dayton, Dayton, Ohio, USA

SESSION 11-ONLINE: GENERAL: COMPUTATIONAL SCIENCE + COMPUTATIONAL INTELLIGENCE + AI + COMPUTATIONAL BIOLOGY + COMPUTER VISION + EDUCATION
(RTPC + RTCB + RTAI + RTCW + RTCC + RTNA + RTSE + RTOT + RTED + RTHI)
December 13, 2024 (Friday); 01:20pm - 06:00pm
(ONLINE - ZOOM)

01:20 - 01:40pm: Training Swin Transformer-Based GAN for High-Resolution Blood Cell Imaging with Limited Data
Tanviben Patel, Hoda El-Sayed, Md Kamruzzaman Sarker, Dat Duong, Benjamin D. Solomon
Department of Computer Science, Bowie State University, Bowie, USA;
National Institute of Health, USA

01:40 - 02:00pm: Comparative Analysis of YOLOv8 and RT-DETR for Real-Time Object Detection in Advanced Driver Assistance Systems
Aryan Parekh, Michael Bauer
Western University, London, ON, Canada

02:00 - 02:20pm: Face Deepfake Detection Based on Up-sampling Feature Extraction and CNN
Shijun Tang
Department of Computer Science, Schreiner University, Kerrville, Texas, USA

02:20 - 02:40pm: Machine Learning Approaches for COVID-19 Classification and Potential Novel Therapeutic Targets
Marina Elia, Wenting Duan
Department of Computer Science, University of Lincoln, UK

02:40 - 03:00pm: Large Language Magic: Conjuring the Future Of Education with LLMs
Robert Langenderfer
Computer Science and Engineering Technology, University of Toledo, Toledo, Ohio, USA

03:00 - 03:20pm: Internet of Things (IoT) Transforming Connectivity and Data Utilization
Victor Clincy, Ranae Whyte
Kennesaw State University, Georgia, USA

03:20 - 03:40pm: Transition Challenges in Discrete Mathematics: Comparing Domestic and International Student Performance
Alan Bowen-James, Mary Ruth Freislich
Crown Institute of Higher Education, Sydney, Australia;
School of Mathematics and Statistics, University of New South Wales, Sydney, Australia

03:40 - 04:00pm: GallNet: A Hybrid Architecture for Gallbladder Cancer Detection
Temesgen Alemayehu Tikure, Jiang Bian, Kedus Leji Yared, Yeabsira Retta, Kalkedan Tewodros Ameha, Aychluhum Awole, Sridhar Malkaram, Fred Wu
West Virginia State University, Institute, West Virginia, USA;
Tongji University, Shanghai, P. R. China;
Marshall University, Huntington, West Virginia, USA;
United State University, San Diego, California, USA;
University of La Verne, La Verne, California, USA;
Massachusetts Institute of Technology, Massachusetts, USA

04:00 - 04:20pm: A Review on Feature Selection-based Intrusion Detection in Cloud Computing
Kgothatso A. Kwinana, Topside E. Mathonsi, Solly P. Maswikaneng, and Thabiso N. Khosa
Tshwane University of Technology, Tshwane, South Africa

04:20 - 04:40pm: Sentiment Analysis of X Discourse on Hash Tag 'Stopgalamsey' in Ghana
Emmanuel Akwah Kyei, Justice Williams Asare, Emmanuel Freeman, Patrick Acheampong, Israel Edem Agbehadji, Richard C Millham
Faculty of Computing and Information Systems, Ghana Communication Technology University, Accra, Ghana;
Department of Computer Science, Ghana Communication Technology University, Accra, Ghana;
Faculty of Accounting and Informatics, Durban University of Technology, Durban, South Africa;
ICT and Society Research Group, Department of Information Technology, Durban University of Technology, Durban, South Africa;
Faculty of Applied Science and Technology, Koforidua Technical University, Koforidua, Ghana

04:40 - 05:00pm: Gender-Based Violence as a Cyberthreat: The Impact of Social Media on Digital Security
Patricio Zambrano, Jenny Torres, Carlos Anchundia, Johan Illicachi
Department of Informatics and Computer Science, Escuela Politecnica Nacional, Quito, Ecuador

05:00 - 05:20pm: The Role of Team Dynamics and Development Practices in Driving Software Excellence
Tshipuke Vhahangwele, Bassey Isong, Adnan Abu-Mahfouz
North-West University, Mafikeng, South Africa;
Council for Industrial Scientific and Industrial Research, Pretoria, South Africa

05:20 - 05:40pm: Blending Computational Thinking and Creativity: Algorithmic Art with Python
May J. Gao, Aurelia M. Donald
Ronald W. Reagan High School, Pfafftown, North Carolina, USA;
Reginald F Lewis College of Business, Virginia State University, Petersburg, Virginia, USA

05:40 - 06:00pm: Practical Considerations for Selecting Metrics to Evaluate Automatic Speech Recognition Systems
Aditya Dhaka, Nihar R. Mahapatra
Electrical and Computer Engineering, Michigan State University, Michigan, USA

LIST OF PRE-RECODED PRESENTATIONS / POST-CONFERENCE

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Authors and speakers were given the following presentation options:

OPTION 1: Presenting the paper on site at the conference.
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 2024 web site at (https://www.american-cse.org/csci2024/).

The list that appears below includes all those papers and posters whose authors will likely be providing pre-recorded presentations (OPTION 3).

CSCI-RTAI: RESEARCH TRACK ON ARTIFICIAL INTELLIGENCE
https://www.american-cse.org/csci2024/RTAI
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O. Optimizing Predictive Performance: A Comparative Study of Machine Learning Algorithms for Classification Tasks
Adedeji Olugboja
York College of the City University of New York (CUNY), New York, USA

O. Large Language Models for Text Classification: A New Era of Accuracy and Efficiency
Dario P. Dos Santos, Fabio Lopes Mendonca, Joao Paulo Lustosa,
Andre Serrano, Jose Alberto Sousa Torres, Daniel A. da Silva
Department of Electrical Engineering, University of Brasilia (UnB),
Brasilia, Brazil;
Hamm-Lippstadt University of Applied Sciences, Germany

O. Integrating Contextual Information and Attention Mechanism in Recommendation Models
Jing Qin, Guanfeng Li, Wenxin Gao, Feizhou Qin
College of Information Engineering, Ningxia University, Yinchuan,
Ningxia, China

O. Detecting Reliable Trends With Artificial Neural Networks
Alberto Arteta, Luis Fernando de Mingo Lopez, Long Ma
Troy University, Troy, Alabama, USA;
Universidad Politecnica de Madrid, Madrid, Spain

O. Comparative Analysis of Kolmogorov-Arnold Networks and Traditional Machine Learning Models for Breast Cancer Prognosis
Haseebullah Jumakhan, Amir Mirzaeinia
Artificial Intelligence Research Center (AIRC), Ajman University,
Ajman, United Arab Emirates;
University of North Texas, Denton, Texas, USA

O. Advancing AI: Exploring the Potentials of Multimodal Large Language Models
Md Julfiker Ali Jewel, Ali Al-Sinayyid, Masudur Rahman
Department of Math and Computer Science, West Virginia State University,
Institute, West Virginia, USA;
Department of Biomedical Engineering, Marshal University, Huntington,
West Virginia, USA

O. AI-Based Framework for Assessing Innovativeness in Product Design Categories
Yetunde Folajimi, Erik Noyes, Salem Othman, Leonidas Deligiannidis
Wentworth Institute of Technology, Boston, MA, USA;
Babson College, Wellesley, MA, USA

O. High-Accuracy Goal Detection and Distance Measurement Using ToF Camera in CanSat
Takuya Saito, Miho Akiyama
Tokyo University of Information Sciences, Chiba, Japan

O. DBRH-5: Legendre Polynomial-based Attention Mechanism in Dual-branch Hybrid-5 Towards Arrhythmia Diagnosis
Joseph Roger Arhin, Xiaoling Zhang, Kenneth Coker, Francis Sam, Jones Apawu, and Nicole Naa Darkua Ribeiro
School of Information and Communication Engineering, University of Electronic Science and Technology of China, Chengdu, China;
Department of Electrical and Electronic Engineering, Ho Technical University, Ho, Ghana;
School of Information and Software Engineering, University of Electronic Science and Technology of China, Chengdu, China;
Department of Mathematics Education, University of Education, Winneba, Ghana;
School of Medical Sciences, College of Health and Allied Sciences, University of Cape Coast, Cape Coast, Ghana

O. Assisting Personal Support Worker's e-Training with AI Prediction
Edward R. Sykes, Jinhe Zhang, Uri Sevilla
University of Guelph, Guelph, Ontario, Canada;
McMaster University, Hamilton, Ontario, Canada;
Nevvon (a global company)

O. Multi-task Model-based Complete Ensemble Empirical Mode Decomposition with Adaptive Noise and BiLSTM with Bayesian Optimization for PM2.5 and Ozone Prediction
Israel Edem Agbehadji, Ibidun Christiana Obagbuwa
Department of Computer Science and Information Technology, Faculty of Natural and Applied Sciences, Sol Plaatje University, Kimberly, South Africa

O. A Declarative Approach to Tackle Sawmill Production Scheduling with Answer Set Programming
Giacomo Da Col, Philipp Fleiss, Alice Tarzariol, Erich C. Teppan, and Elena Wiegelmann
Fraunhofer Austria, Innovationszentrum fur Digitalisierung und Kunstliche Intelligenz (KI4LIFE), Lakeside, Klagenfurt, Austria;
University of Klagenfurt, Austria

O. A Comprehensive Review of Predictive Maintenance Technologies for Vehicle Reliability
Sofiane Aissani, Mawloud Omar, Khaled Hamouid
LIST3N Laboratory - University of Technology of Troyes, Troyes, France;
IRISA Laboratory - University of South Brittany, Vannes, France;
LIGM Laboratory - ESIEE Paris, Gustave Eiffel University, Noisy-le-Grand, France

O. Systematic Review of Portfolio Optimization in the Brazilian Financial Market: Integrating News and Fundamental Indicators with Deep Reinforcement Learning
Kethlyn Campos Silva, Deborah Fernandes, Marcio Fernandes, Fabrizzio Soares, and Thiago Monteles de Sousa
Institute of Informatics, Federal University of Goias, Goiania, Brazil;
Information Systems (CCET), State University of Goias, Anapolis, Brazil

O. Development and Evaluation of a Sentiment Indicator based on Financial News in Portuguese
Kethlyn Campos Silva, Felipe Sa, Deborah Fernandes, Marcio Fernandes, and Fabrizzio Soares
INF, Federal University of Goias, Goiania, Brazil;
CCET, State University of Goias, Anapolis, Brazil

O. Enhancing Binary Classification Accuracy Using Hybrid Ensemble Methods
J.M. Imtinan Uddin, Tahsin Haque Toha, Hong Qin
The University of Tennessee at Chattanooga, Tennessee, USA;
Chittagong University of Engineering and Technology (CUET), Bangladesh;
Old Dominion University, USA

O. Next Generation Imminent Fracture Risk Assessment Using AI
Edward R Sykes, Liran Ashbel, Ravi Jain
University of Guelph, Guelph, Ontario, Canada;
Ontario Osteoporosis Strategy at Osteoporosis Canada, Canada

O. A Comprehensive Study on Fake News Detection Using Machine Learning
Cameron Baron, Nada Alsallami
Computer Science Department, Worcester State University, MA, USA

O. Interpretable Machine Learning: A Survey Of Current Techniques
Rachel Bonas, Md Kamruzzaman Sarker
Bowie State University, Bowie, Maryland, USA

O. A Solution of Traveling Salesman Problem Using Deep Learning
Azuharu Fayyaz Nishida, Takehiko Ogawa
Mechanical and Electronic System Engineering, Takushoku University,
Tokyo, Japan

O. Comparison of Graph Convolutional Networks and Graph Attention Networks in Graph Classification: A Performance Analysis Using the Letter Database
Patrick Maas, Lena C. Altherr, Patrick Philipp
Faculty of Mathematics and Technology, Koblenz University of Applied Sciences, Remagen, Germany;
Faculty of Electrical Engineering, Aachen University of Applied Sciences, Aachen, Germany

O. Exploring Multi-Objective Reinforced Learning with Dynamic Weighted Sentiment Reward Functions to Improve National Security Decision-Making
Devon L. Brown
Howard University, Washington, DC, USA

O. Decision Support: How Explainable A.I. Can Improve Transparency & Trust with Human Users
Devon L. Brown, Chunmei Liu
Howard University, Washington, DC, USA

O. Federated Learning Combined with Attention Applied to Ad Click Prediction
Guang Hu, Jiaqi Wu
School of Statistics and Information, Shanghai University of International Business and Economics, Shanghai, China;
School of Computer Science, Fudan University, Shanghai, China;
Shanghai Key Laboratory of Data Science, Shanghai, China

O. Investigation of the Effect of Signal Enhancement in Use of Handcrafted and ML-Based Feature Map Representation for EEG Biometrics
Omer Muhammet Soysal, Iphy Emeka Kelvin, Muhammed Esad Oztemel
Department of Computer Science, Southeastern Louisiana University, Hammond, Louisiana, USA;
Division of Electrical and Computer Engineering, Louisiana State University, Baton Rouge, Louisiana, USA

O. Dynamic Cybersickness Mitigation via Adaptive FFR and FoV adjustments
Ananth N. Ramaseri-Chandra, Hassan Reza
University of North Dakota, Grand Forks, North Dakota, USA;
Turtle Mountain College, Belcourt, North Dakota, USA

O. On Application of Alpha Integration to the Fusion of Multiple Classifiers
Addisson Salazar, Luis Vergara, Alberto Rodriguez
Universitat Politecnica de Valencia, Institute of Telecommunications and Multimedia Applications, Valencia, Spain;
Universidad Miguel Hernandez de Elche, Departamento de Ingenieria de Comunicaciones, Elche, Spain

O. IoT Smart Home Security: Improving Cyberattacks Detection with Stacked Ensemble Methods
Otshepeng Kgote, Bassey Isong*, Abu-Mahfouz, Nosipho Dladlu
North-West University, Mafikeng, South Africa;
Council for Industrial Scientific and Industrial Research, Pretoria, South Africa

O. AR-SVM for Ocean Wave Characteristics Identification
Nuoyi Zhu, Yeesock Kim
Worcester Polytechnic Institute, Worcester, MA, USA;
California Baptist University, Riverside, California, USA

CSCI-RTBD: RESEARCH TRACK ON BIG DATA AND DATA SCIENCE
https://www.american-cse.org/csci2024/RTBD
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O. Automated Document Classification and Data Extraction System Using Machine Learning: A Case Study for Academic Document Management
Sulaiman Rahman, Marjan Asadinia
California State University, Northridge, California, USA

O. Analyzing the Complexity of Yen-Dollar Exchange Rates: Recurrence Quantification, Orthogonal Matching Pursuit, and Anomaly Detection
Yuwen Zhao, Amir Assadi
University of Toronto, Toronto, Canada;
University of Wisconsin-Madison, Wisconsin, USA

O. Data Governance Frameworks in Academic and Grey Literature and Their Applicability To SMEs
Bushra Al Sulayyim, Madhushi Bandara, Asif Gill, Ghassan Beydoun
University of Technology Sydney, Australia

O. A Comparative Analysis of Data Anonymization Techniques: Evaluating K-Anonymity, L-Diversity, and T-Closeness in Mondrian L Diversity, Basic Mondrian, Mondrian, DataFly and Top-Down Greedy Algorithms
Kaan Kivircik, Emine Sezer, Deniz Kilinc
Computer Engineering, Ege University, Izmir, Turkey;
Computer Engineering, Bakircay University, Izmir, Turkey

O. Staging of Neuropsychological Tests from Functional Magnetic Resonance Imaging and Electroencephalography Recordings
Addisson Salazar, Luis Manuel Pereira, Luis Vergara, Alberto Gonzalez
Universitat Politecnica de Valencia, Institute of Telecommunications
and Multimedia Applications, Valencia, Spain

O. Data Science in Healthcare Systems: A Comprehensive Review and Future Directions
Adedeji Olugboja
York College of the City University of New York (CUNY), New York, USA

O. Techniques to Improve the Utility of Synthetic Data using XAI and Tabular GAN-based Approaches
Minchae Song
NH Financial Research Center, NongHyup Financial Group, Seoul, South Korea

O. Characteristics of Records in Cervical Screening
Frank (D-C) H
NPA, Rockville, Maryland, USA

O. Mobility Metrics in Riyadh, Jeddah, and Dammam: A Detailed Comparative Analysis
Meshal Alnefaie, Ivica Kostanic
Department of Electrical Engineering and Computer Science,
Florida Institute of Technology, Melbourne, Florida, USA

CSCI-RTCS: RESEARCH TRACK ON COMPUTATIONAL SCIENCE
https://www.american-cse.org/csci2024/RTCS
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O. Range Search In Constant Time
Venkata Nikhilesh Chintala, Yijie Han
School of Science and Engineering, University of Missouri at Kansas City,
Kansas City, Missouri, USA

O. Quantum Algorithm for a Special Case of the Dihedral Hidden Subgroup Problem
Hachiro Fujita
Department of Computer Science, Tokyo Metropolitan University,
Hino-shi, Tokyo, Japan

O. Optimizing GCC with ICC as the Performance Goal for SPEC CPU 2006 and 2017
Hanke Zhang, Puzhou Hou, Xiaohua Shi
School of Software, Beihang University, Beijing, China

O. The 2D/3D Image Steganography Performance Enhancement Utilizing
Correlation-based Empirical CPU Model
Kurt Costin, Shezad Rouf Khondker, Khondker Shajadul Hasan
Computer Science, University of Houston Clear Lake, Houston, Texas, USA;
Engineering Program, University of Houston, Houston, Texas, USA

CSCI-RTCI: RESEARCH TRACK ON COMPUTATIONAL INTELLIGENCE
https://www.american-cse.org/csci2024/RTCI
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O. Cryptocurrencies and Transformers: A Regression Model to Price Forecasting
Carlos Montenegro
Escuela Politecnica Nacional, Quito, Ecuador

O. A Heuristic Search Algorithm for the Collaborative Freighter Delivery Problem
Erich Teppan, Christina Petschnigg, Elena Wiegelmann, Gabriele Spini,
and Stephan Krenn
Fraunhofer Austria, Klagenfurt, Austria;
University of Klagenfurt, Klagenfurt, Austria;
AIT Austrian Institute of Technology, Vienna, Austria

O. Electric Eel Foraging Optimization Based on Cauchy Distribution Method for Constrained Engineering Design Problems
Ayse Beskirli
Karamanoglu Memetbey University, Karaman, Turkey

O. Computational Science and Intelligence for Eliminating Uncertainty from Applied Mathematical Models of Real-Life Problems via Pivotal Quantities and Ancillary Statistics to Construct Adequate Statistical Decisions
Nicholas Nechval, Gundars Berzins, Konstantin Nechval
BVEF Research Institute, University of Latvia, Riga, Latvia;
Riga Aeronautical Institute, Riga, Latvia

CSCI-RTCB: RESEARCH TRACK ON COMPUTATIONAL BIOLOGY
https://www.american-cse.org/csci2024/RTCB
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O. A Research Plan on Biological Mathematics
Xinhua Ji
Institute of Mathematics, Academy of Mathematics and Systems Science,
Chinese Academy of Sciences, Beijing, China

O. A Wavelet-based Study on Tumor Evolution with Lotka-Volterra Ecology Models and a Game Theoretical Approach
Nathan Zhang, Alejandro Antonio Mayorga, Ruby Zhao, Tong Liu, Yongzhong Zhao, and Xiaodi Wang
Western Connecticut State University, Danbury, Connecticut, USA;
Tsinghua University, Beijing, China;
Frontage Labs, USA

CSCI-RTCW: RESEARCH TRACK ON CYBER WARFARE, CYBER DEFENSE, & CYBER SECURITY
https://www.american-cse.org/csci2024/RTCW
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O. A Study on the Importance of Features in Detecting Advanced Persistent Threats Using Machine Learning
Ehsan Hallaji, Roozbeh Razavi-Far, Mehrdad Saif
University of Windsor, Windsor, ON, Canada;
University of New Brunswick, Fredericton, NB, Canada

O. Dependency Driven Data Exfiltration Prevention via eBPF for 3rd Party Libraries
Aleksandr Krasnov, Richard Maiti
Meta, Facebook Inc, Vancouver, BC, Canada;
Kentucky State University, Frankfort, Kentucky, USA

O. Tactical Zero Trust Architectures in a Coalition Environment
Thomas Schmitt, Alan Shaffer, Gurminder Singh
Naval Postgraduate School, Monterey, California, USA

O. Firewall Security Management Time Modeling
Choong-Hee Han
Chonnam National University, Korea;
Power Exchange, Korea

O. Verifying Data Integrity in Smart Contracts
Imran Pinjari, Vaishnavi Kattula, Michael Shin
Computer Science, Texas Tech University, Lubbock, Texas, USA

O. Botnet Attack Detection Using Machine Learning
Hailah Alessa, Amjad Alharbi, Layan Alshalawi, Arwa Aldosari,
Fatmah Alanazi, Jawzaa Almutairi
Computer Science Department, College of Computer and Information Sciences,
Imam Mohammad Ibn Saud Islamic University (IMSIU), Riyadh, Saudi Arabia

O. Intentional Reproduction of Vulnerable Environments
Seiya Kamata, Akihito Nakamura
University of Aizu, Aizu-Wakamatsu, Fukushima, Japan

CSCI-RTPC: RESEARCH TRACK ON SIGNAL & IMAGE PROCESSING, COMPUTER VISION & PATTERN RECOGNITION
https://www.american-cse.org/csci2024/RTPC
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O. Development of a Mobile-Based Gaze-Tracker for Enhanced Survey Responses: Integrating Eye Gaze as a Weight Factor in Answer Evaluation
Michael Winter, Lars Eckel, Manfred Reichert, Rudiger Pryss
Institute of Clinical Epidemiology and Biometry, University of Wurzburg, Germany;
Institute of Medical Data Science, University Hospital of Wurzburg, Germany;
Institute of Databases and Information Systems, Ulm University, Ulm, Germany

O. Training Swin Transformer-Based GAN for High-Resolution Blood Cell Imaging with Limited Data
Tanviben Patel, Hoda El-Sayed, Md Kamruzzaman Sarker, Dat Duong, and Benjamin D. Solomon
Department of Computer Science, Bowie State University, Bowie, USA;
National Institute of Health, USA

O. Simultaneous Effects of Mask Wearing and Racial Difference on Age and Gender Estimation Model for Facial Images Using Deep Learning
Kenta Kubotera, Masakazu Akiba, Tadayoshi Horita
Shizuoka Polytechnic Center, Suruga-ku Toro, Shizuoka, Japan;
Polytechnic University, Ogawa-nishimachi, Kodaira-shi, Tokyo,Japan

O. A Method of Visual Positioning of Tank Truck Openings via Two-Stage Fine-Tuning
MingShou An, XuHang Zhao, Fei Xu, Hye-Youn Lim, Dae-Seong Kang
School of Computer Science and Engineering, Xi'an Technological University,
Weiyang District, Xi'an, Shaanxi Province, P. R. China;
Department of Electronics Engineering, Dong-A University,
Saha-gu, Busan, Korea

O. Road Infrastructure Defect Detection Using Computer Vision
Norah A. Alsubaie, Ghada N. Almutairi, Ghayda A. Almalki, Sarah A. Alrumaih
Department of Computer Sciences, Princess Nourah Bint Abdulrahman University,
Riyadh, Saudi Arabia

O. Interpretable Convolutional Neural Network for Violence Recognition
Paris Her, Edwin Yaz, Susan Schneider
Electrical and Computer Engineering Department, Marquette University,
Milwaukee, Wisconsin, USA

O. Multimodal Breast Ultrasound Segmentation: Combining Visual and Clinical Data
Armando Mendez, Meng Xu, Kuan Huang
Kean University, Union, New Hersey, USA

O. Benchmarking the Robustness of Segmentation Methods Against Adversarial Attacks in Breast Ultrasound Segmentation
Maryam Ahmed, Joanna Loja, Kuan Huang, Meng Xu
Kean University, Union, New Hersey, USA

O. Text-Guided Weakly Supervised Segmentation for COVID-19 Detection in X-Ray Images
Cesar Marte, Meng Xu, Kuan Huang
Kean University, Union, New Jersey, USA

O. MRI Image-Based Mapping of Human Head Motion and Brain Ventricular Cerebrospinal Fluid Flows using Computer Vision
Jin Xu, William W. Liou, Shinya Yamada, Madoka Nakajima, Masakazu Miyahara, and Ko Horikoshi
Sichuan University - Pittsburgh Institute, Chengdu, Sichuan, China;
Western Michigan University, Kalamazoo, Michigan, USA;
Department of Neurosurgery, Juntendo University, Tokyo, Japan

O. A Deep Learning Framework for Predicting Temporal PPG Signals through Facial Region Extraction with YOLO
Ayesha Sadiqqa, Shi-Jinn Horng
Department of Computer Science and Information Engineering,
Asia University, Taiwan;
Department of Medical Research, China Medical University Hospital,
China Medical University, Taichung, Taiwan

O. Enhancing Video and Image Analysis with SAM2: Experimental Insights for Diverse Applications
Chandramohan Reddy Poreddy, Ching-Hsien Hsu
Department of Computer Science and Information Engineering,
Asia University, Taichung, Taiwan

O. A Unified Approach to Cloud Data Analytics
Shivali Naik
Professional Services, Snowflake, San Francisco, California, USA

CSCI-RTSC: RESEARCH TRACK ON SMART CITIES AND SMART MOBILITY
https://www.american-cse.org/csci2024/RTSC
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O. AI-Enhanced Dispatch Strategies for Electric Vehicular Internet of Things in Smart Cities
Abdoh Mohammad Jabbari, Faheem Ahmad Reegu
Department of Electrical and Electronics Engineering, College of Engineering and Computer Science, Jazan University, Jazan, Saudi Arabia

O. System Architecture for Evaluating Driver Monitoring based on Virtual Driver Model
Woojin Kim, Cheonin Oh, Do Wook Kang, Seung-Jun Lee, Hyun Suk Kim, Eun Hye Jang, Daesub Yoon
Electronics and Telecommunications Research Institute, Daejeon, Korea

O. Real-Time Traffic Camera Data for Enhanced Route Planning
Aditya Parekh, Maryam Ahmed, Daniel Cachola, Daehan Kwak
Kean University, Union, New Jersey, USA

O. Mental Health Discussion: A Sentiment and Topic-Based Analysis
Joseph Tomasello, Daehan Kwak
Kean University, Union, New Jersey, USA

O. Motorcyclist Behavior Detection Using Fuzzy Logic and LOF Analysis
Luis Ferreira, Paulo Salgado, Antonio Valente
Sciencies and Technology Institute, University of Tras-Os-Montes e Alto Douro, Vila Real, Portugal;
INESC TEC- INESC Technology and Science Porto, Portugal

O. A Priority-based Congestion Control Algorithm for On-road Traffic in Smart City
Ndivhuho Tshilongamulenzhe, Deon P. Du Plessis, Topside E. Mathonsi, Lungisani Ndlovu
Department of Information Technology, Tshwane University of Technology, Pretoria, South Africa

CSCI-RTED: RESEARCH TRACK ON EDUCATION
https://www.american-cse.org/csci2024/RTED
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O. The Applications of Smart Contracts in Class-room Teaching
Yong Zhang
Department of Computer Science & Information Technology,
Kutztown University, PA, USA

O. Incorporating CUDA Unified Memory into the Operating System Curriculum
Janche Sang
Department of Computer Science, Cleveland State University,
Cleveland, Ohio, USA

O. Experiencing Android App Development and Connecting Students Together
Joshua Fife, Nada Alsallami
Computer Science Department, Worcester State University, MA, USA

O. Educational Hangman: A Web Platform to Generate Customizable Hangman Games for Learning Vocabulary in Primary School Children
Carlos R. Jaimez-Gonzalez, Fernanda Orozco-Tapia, Betzabet Garcia-Mendoza
Departamento de Tecnologias de la Informacion, Universidad Autonoma
Metropolitana, Ciudad de Mexico, Mexico

O. Large Language Magic: Conjuring the Future Of Education with LLMs
Robert Langenderfer
Computer Science and Engineering Technology, University of Toledo,
Toledo, Ohio, USA

O. Increasing Student Success by Implementing Autograded Programming Assignments
Varick L. Erickson
California State University East Bay, Hayward, California, USA

O. Blending Computational Thinking and Creativity: Algorithmic Art with Python
May J. Gao, Aurelia M. Donald
Ronald W. Reagan High School, Pfafftown, North Carolina, USA;
Reginald F Lewis College of Business, Virginia State University,
Petersburg, Virginia, USA

CSCI-RTHI: RESEARCH TRACK ON HEALTH INFORMATICS AND MEDICAL SYSTEMS
https://www.american-cse.org/csci2024/RTHI
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O. A Surgical Assistance System for Emergency Medical Care in Ambulances
Xian Gao, Peixiong He, Yi Zhou, Xiao Qin
TSYS School of Computer Science, Columbus State University,
Columbus, Georgia, USA;
Department of Computer Science and Software Engineering,
Auburn University, Auburn, Alabama, USA

O. Advancing Brain-Computer Interfaces through Functional Connectivity Analysis of EEG Data in ADHD during Facial Emotion Processing: A Higher Order Network-Based Approach
Dong Ranyi, Amir Assadi
University of Birmingham, Birmingham, UK;
University of Wisconsin-Madison, Madison, Wisconsin, USA

O. Brain Tumor Classification through Transfer Learning Models
Shaghayegh Khalighiyan, Mohammad Hassanzadeh, Esam Abdel-Raheem
Electrical and Computer Engineering, University of Windsor, Windsor, Canada

O. Places365-CNNs for 4-Way Classification of Alzheimer's Disease using MRI Images
Lilia Lazli, Mounir Boukadoum, Farida Cheriet
Department of Computer and Software Engineering, Polytechnique Montreal, Canada;
Department of Computer Science, Universite du Quebec a Montreal (UQAM), Canada

O. EEG Spectral Band Analysis in Mental Health: Insights from Explainable AI in Functional Connectivity
Jing Chang, Amir Assadi
University of Wisconsin, Madison, WI, USA

O. Machine Learning-Based Model for Predicting Coronary Heart Disease Using PreB HDL and Cytokines as Plasma Biomarkers
Seema Singh Saharan, Kate Townsend Creasy, Lauren Birnbaum, Eveline O. Stock,
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O. The Impact of Task Sequence and Worker Personality on Mental and Physical Stress in a Human-Robot Collaboration Environment
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O. Development of Medical Databases using Large Language Models
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O. Analysis of Neighborhood Map-Based Wireless Medium Access Control
Daniel C. Lee
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O. Relative Location Information Acquisition without Direct Distance Measurement in Mobile System
Naoki Takebayashi, Hiroaki Higaki
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O. Enhanced Layered Architectures and Semi-Formal Representations in Refactoring using Domain-Driven Design
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O. Analyzing Class Stability Through C&K and Evolution Metrics: An Empirical Study
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O. Scientific Legacy Code Enhancement and Testing Strategies: Fortran Example
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O. Towards Development and Implementation of Bioinspired Algorithms to Enhance Self-Healing and Fault Tolerance in Critical Software Systems
Kapila Molri, Majid Shaalan
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O. Verifiable Credentials Framework and Certificate Visualization Associated with Blockchain Accounts
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O. A Distributed Intrusion Detection Framework for Cloud and Edge Computing-Assisted Internet of Things
Gary Sun, Jing Zhang
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O. Algorithms and Technologies Behind Livestock Monitoring: A Systematic Literature Review
Mahamat Abdouna, Daouda Ahmat Mahamat, Brahim Issa Hassaballah
Virtual University of Chad, N'Djamena, Chad;
University of NDjamena, N'Djamena, Chad

O. Enhancing MQTT for Targeted Communication in Automated Smart Homes
Hitesh Pambhar, Jinsuk Baek
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Winston-Salem State University, Winston-Salem, North Carolina, USA

O. GNSS-based Displacement Monitoring and Control IoT System
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O. IoT System for Monitoring and Control of Manhole Covers
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O. Intrusion Detection in IoT-driven Cyber-Physical Systems: Analyzing Centralized and Federated Learning Performance in Non-IID Environments
Muhammad Ali, Rao Naveed Bin Rais, Osman Khalid, Kashif Bilal
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Ajman University, Ajman, UAE

O. Developing a Distributed Message Broker for the EMULSION IoT Platform

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O. Sensitive Behavior Learning Based on Side Channel Data for Smart Terminal Applications in Power IoT
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O. EMULSION - Horizontal IoT Platform
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O. Improvement of the Redundant Traffic Reduction Node with a Stream Cache
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O. Evaluating Divide-and-Swap Cube Fault-Tolerated Capability Based on Neighbor Connectivity
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O. SD-Cluster: A SDN Controller Cluster
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O. Uncovering Network Complexity: A Tale of Two Designs
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