

GENERAL INFORMATION

IMPORTANT: To prepare the congress program/schedule, the title of all papers, authors names, affiliations were extracted from the meta-data of the draft paper submissions (manuscripts submitted by the authors for evaluation). Any changes to the titles of the final papers, authors names, affiliations are not reflected in this program.

ALL DATES AND TIMES ARE GIVEN IN USA PACIFIC TIME ZONE (PT).

REGISTRATION: CONFERENCE REGISTRATION DESK:

July 21 (Sunday): 04:00pm - 06:30pm
July 22 (Monday): 07:00am - 05:00pm
July 23 (Tuesday): 07:00am - 05:00pm
July 24 (Wednesday): 07:00am - 05:00pm
July 25 (Thursday): 07:00am - 02:00pm
(LOCATION: Ballrooms B & C)

BREAKFASTS: July 22 (Monday): 07:20am - 08:20am
July 23 (Tuesday): 07:20am - 08:20am
July 24 (Wednesday): 07:20am - 08:20am
July 25 (Thursday): 07:20am - 08:20am
(LOCATION: Ballrooms B & C)

DINNER: July 22 (Monday): 07:15pm - 09:30pm
(LOCATION: Velvet Room)

BREAKS: REFRESHMENTS

July 22 (Monday): 10:00am - 10:20am
July 22 (Monday): 03:00pm - 03:40pm
July 23 (Tuesday): 10:00am - 10:20am
July 23 (Tuesday): 03:00pm - 03:40pm
July 24 (Wednesday): 10:00am - 10:20am
July 24 (Wednesday): 03:00pm - 03:40pm
July 25 (Thursday): 10:00am - 10:20am
July 25 (Thursday): 03:00pm - 03:20pm
(LOCATION: Ballrooms B & C)

July 21

04:00p - 06:30pm: REGISTRATION
Sunday
(LOCATION: Galleria B & C; Registration Counter/Desk)

July 22

07:00a - 05:00p: REGISTRATION
(LOCATION: Galleria B & C; Registration Counter/Desk)

<----- LOCATION: Ballrooms Galleria D & E ----->

08:30 - 08:50am: CONGRESS WELCOME REMARKS - July 22, Monday:
Professor Emeritus Hamid R. Arabnia (Chair, Steering
Committee & Coordinator), School of Computing,
University of Georgia, USA; Editor-in-Chief, The Journal
of Supercomputing (Springer Nature); Fellow, Center of
Excellence in Terrorism, Resilience, Intelligence &
Organized Crime Research (CENTRIC).
(LOCATION: Galleria D & E)

08:50 - 09:50am: KEYNOTE LECTURE - July 22, Monday:
THE EFFECT OF TECH SAVVINESS OF THE DESIGN AND INTERACTION
OF AI SYSTEMS: THE EXPLORATION OF TRUST
Professor John C. Murray
Academic Dean of the Faculty of Technology at the University
of Sunderland, UK, and
Professor of Robotics and Autonomous Systems,
University of Sunderland, UK
(Duration: 40 minutes lecture & 20 minutes of Q&A)
(LOCATION: Galleria D & E)

09:50 - 10:00am: INFORMATIONAL
ADVANCING DISCOVERY - Springer Nature's EquinOCS
Ms. Patti Davis
Executive Editor
Springer Nature
(LOCATION: Galleria D & E)

10:00 - 10:20am: BREAK (Refreshments)
(LOCATION: Galleria B & C; Registration Counter/Desk)

10:20 - 11:20am: KEYNOTE LECTURE - July 22, Monday:
THE DAWN OF COGNITIVE AI, SELF-AWARE ROBOTICS, AND THE
INDUSTRIAL METAVERSE
Professor Dr. Diego Galar
Operation and Maintenance Engineering, Lulea University
of Technology (LTU), Sweden
(LOCATION: Galleria D & E)

SESSION 1-MON (ACC TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: APPLIED COGNITIVE COMPUTING & RELATED TOPICS

Co-Chairs: TBA

July 22, 2024 (Monday); 11:20am - 12:20pm

(LOCATION: Ballrooms Galleria D & E)

- 11:20 - 11:40am: High-Precision Method to Reduce Over-fitting in ANNs using Highly Uniform Chaotic Sequences
Samad Shirzadeh, Ken Ferens*, Witold Kinsner
Department of Electrical and Computer Engineering,
University of Manitoba, Canada
- 11:40 - 12:00pm: Assessing Information Influence for Node Attribute Prediction
Tonni Das Jui*, Erich Baker, Mary Lauren Benton
Computer Science Department, Baylor University, Texas, USA;
Belmont University, Nashville, Tennessee, USA
- 12:00 - 12:20pm: Experimental Analysis of Contemporary Trends, Performance, and Limitations in Graph Embeddings: A Comprehensive Review
Tonni Das Jui*, Erich Baker, Mary Lauren Benton
Computer Science Department, Baylor University, Texas, USA;
Belmont University, Nashville, Tennessee, USA
- 12:20 - 01:20pm: LUNCH (On Your Own)

SESSION 2-MON (ICOMP TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: INTERNET COMPUTING & IOT

Co-Chairs: TBA

July 22, 2024 (Monday); 01:20pm - 03:00pm

(LOCATION: Ballrooms Galleria D & E)

- 01:20 - 01:40pm: Understanding User Interactions with IoT Process Models: A Demographic Perspective
Michael Winter*, Yusuf Kirikkayis, Rudiger Pryss, and Manfred Reichert
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
- 01:40 - 02:00pm: Advancing IoT Process Modeling: A Comparative Evaluation of BPMNE4IoT and Traditional BPMN on User-Friendliness, Effectiveness, and Workload
Michael Winter*, Yusuf Kirikkayis, Rudiger Pryss, and Manfred Reichert
Institute of Clinical Epidemiology and Biometry, University of Wurzburg, Germany;
Institute of Medical Data Science, University Hospital of Wurzburg, Germany

- 02:00 - 02:20pm: Malware Detection in the IoT Home Network
Haydar Teymourlouei*, Daryl Stone
Department of Technology & Security, Bowie State University,
Bowie, Maryland, USA
- 02:20 - 02:40pm: Towards Objective Comparison of Security Algorithms for
Resource-Constrained IoT Devices
Marten Fischer*, Ralf Tonjes
Hochschule Osnabruck, Osnabruck, Germany;
University of Applied Sciences Osnabruck, Osnabruck, Germany
- 02:40 - 03:00pm: Re/Imagining Smart Home Automation Framework in the era of
6G-Enabled Smart Cities
Byungkwan Jung*, Suman Kumar, Adityasinh Manthansinh Chauhan
Department of Computer Science, Troy University, Alabama, USA
- 03:00 - 03:40pm: BREAK (Refreshments) & POSTERS
July 22, 2024 (Monday)
(LOCATION: Galleria B & C; Registration Counter/Desk)**
0. Uncertainty Quantification for Ride Quality Mobility Tests
using CREATE-GV Mercury
Jeremy Mange*, Sara Boyle
US Army - Ground Vehicle Systems Center, Warren,
Michigan, USA
0. From Static Graph Attention Generation to Dynamic Graph
Attention Coefficient
Tonni Das Jui*, Mary Lauren Benton, Erich Baker
Computer Science Department, Baylor University, Waco,
Texas, USA;
Belmont University, Nashville, Tennessee, USA
0. Application of Data Science Techniques to Performing Arts
Toshiyuki Maeda*, Masumi Yajima, Akiyoshi Wakatani
Hannan University, Japan
0. A Framework for Evaluating Organization Accelerator Success
David Kever
Leidos, Inc., Reston, Virginia, USA
0. A Low-Cost Automatic DEF Refueling Controller for Diesel
Generators
Dania Mosuli*, Hakduran Koc
College of Science and Engineering, University of
Houston-Clear Lake, Houston, Texas, USA
0. Design Of an Autonomous Mower and Embedded Microcontroller
Bassam Shaer*, Natalia Dejesus, Tyler Murray, Malcolm Jones
ECE and ME Engineering Departments,
University of West Florida, Fort Walton Beach, Florida, USA
0. Leveraging Chatbots for Academic Advising to Help Overcome
Advising Challenges
Mel Akhimiemona, James Braman*
Computer Science, Information Technology, Community College
of Baltimore County, Baltimore, Maryland, USA

July 22

SESSION 3-MON (FCS TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: FOUNDATIONS OF COMPUTER SCIENCE

Co-Chairs: TBA

July 22, 2024 (Monday); 03:40pm - 04:40pm

(LOCATION: Ballrooms Galleria D & E)

- 03:40 - 04:00pm: Exploring Efficient but Intricate Delivery Truck Routing Heuristics in Supply Chain Management
Ahmed Tarek*, Ahmed Alveed, Ahmed Farhan
Engineering, Physical, & Computer Sciences (EPCS) Department, Science, Engineering & Technology (SET) Division, Montgomery College, Rockville, Maryland, USA;
The Wharton School, University of Pennsylvania, Philadelphia, Pennsylvania, USA;
School of Medicine, The Johns Hopkins University, Baltimore, Maryland, USA
- 04:00 - 04:20pm: Autosymmetry Using GF(2) Matrices
Peter M. Maurer
Department of Computer Science, Baylor University, Texas, USA
- 04:20 - 04:40pm: Triangle Packing in Graphs with Bounded Degree
Yong Zhang
Department of Computer Science and Information Technology, Kutztown University, Kutztown, PA, USA

SESSION 4-MON (CSC TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: SCIENTIFIC COMPUTING

Co-Chairs: TBA

July 22, 2024 (Monday); 04:40pm - 05:40pm

(LOCATION: Ballrooms Galleria D & E)

- 04:40 - 05:00pm: Notes on Symmetric Generalized Tent Map: Route to Chaos
Peter Chtcheprov*, Andrei Chtcheprov
University of North Carolina, Chapel Hill, North Carolina, USA;
Independent researcher, Chapel Hill, North Carolina, USA
- 05:00 - 05:20pm: A New Approach Toward Interface-aware Methods for Diffusion Equations
William Dai
Los Alamos National Laboratory, Los Alamos, New Mexico, USA
- 05:20 - 05:40pm: An Evaluation Tool for Cybersickness Mitigation Techniques in a Virtual Reality Environment
Guang Wei Too*, Alan Yuan, Ziqian Dong, Huanying Gu
Department of Computer Science, New York Institute of Technology, New York, USA;
Department of Electrical & Computer Engineering, New York Institute of Technology, New York, USA
- 05:40 - 06:00pm: FREE SLOT
- 06:00 - 06:20pm: FREE SLOT

July 22

07:15 - 09:30pm: CONFERENCE RECEPTION DINNER / SOCIAL
July 22 - Monday; 07:15pm
(LOCATION: Velvet Room)

<----- LOCATION: Ballroom Galleria A ----->

SESSION 5-MON (PDPTA TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

**SCOPE: INTERNATIONAL WORKSHOP ON MATHEMATICAL MODELING AND
PROBLEM SOLVING (MPS)**

Co-Chairs: Prof. Masahito Ohue*, Prof. Nobuaki Yasuo, and
Prof. Masami Takata*****

*** Tokyo Institute of Technology, Japan**

**** Tokyo Institute of Technology, Japan**

***** Nara Women's University, Japan**

July 22, 2024 (Monday); 11:20am - 12:20pm

(LOCATION: Ballroom Galleria A)

11:20 - 11:40am: Inference of Cell-Cell Interactions through Spatial
Transcriptomics Data Using Graph Convolutional Neural Networks
Takahiro Hiura, Shigeto Seno*, Hideo Matsuda
Graduate School of Information Science and Technology,
Osaka University, Osaka, Japan

11:40 - 12:00pm: Natural Product-like Compound Generation with Chemical
Language Models
Koh Sakano, Kairi Furui, Masahito Ohue*
Department of Computer Science, Tokyo Institute of Technology,
Yokohama, Japan

12:00 - 12:20pm: Improved Early-modern Japanese Printed Character Recognition
Rate with Generated Characters
Norie Koiso*, Yuki Takemoto, Yu Ishikawa, Masami Takata
Graduate School of Humanities and Sciences,
Nara Women's University, Nara, Japan

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

SESSION 6-MON (PDPTA TRACK): MPS - Continued ...

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: INTERNATIONAL WORKSHOP ON MATHEMATICAL MODELING AND
PROBLEM SOLVING (MPS)

Co-Chairs: Prof. Masahito Ohue*, Prof. Nobuaki Yasuo**, and
Prof. Masami Takata***

* Tokyo Institute of Technology, Japan

** Tokyo Institute of Technology, Japan

*** Nara Women's University, Japan

July 22, 2024 (Monday); 01:20pm - 03:00pm

(LOCATION: Ballroom Galleria A)

- 01:20 - 01:40pm: Improved Method for Similar Music Recommendation using
Spotify API
Miho Chiyonobu, Masami Takata*
Research Group of Information and Communication Technology
for Life, Nara Women's University, Nara, Japan
- 01:40 - 02:00pm: Reconfigurable Virtual Accelerator (ReVA) for Large-Scale
Acceleration Circuits
Yaguchi Kazuki*, Eriko Maeda, Syunya Kawai, Daichi Teruya,
Yasunori Osana, Takefumi Miyoshi, Hironori Nakajo
Graduate School of Engineering, Tokyo University of
Agriculture and Technology, Tokyo, Japan
- 02:00 - 02:20pm: Building Simulation Environment of (Reconfigurable Virtual
Accelerator) ReVA
Shunya Kawai*, Eriko Maeda, Kazuki Yaguchi, Yasunori Osana,
Takefumi Miyoshi, Hironori Nakajo
Graduate School of Engineering, Tokyo University of Agriculture
and Technology, Tokyo, Japan
- 02:20 - 02:40pm: Vector Register Sharing Mechanism for High Performance
Hardware Acceleration
Tomoaki Tanaka*, Michiya Kato, Yasunori Osana, Takefumi Miyoshi,
Jubee Tada, Kiyofumi Tanaka, Hironori Nakajo
Graduate School of Engineering, Tokyo University of Agriculture
and Technology, Tokyo, Japan
- 02:40 - 03:00pm: Efficient Compute Resource Sharing of RISC-V Packed-SIMD using
Simultaneous Multi-Threading
Shogo Takata*, Hironori Nakajo
Graduate School of Engineering, Tokyo University of Agriculture
and Technology, Tokyo, Japan

July 22

03:00 - 03:40pm: BREAK (Refreshments) & POSTERS

July 22, 2024 (Monday)

(LOCATION: Galleria B & C; Registration Counter/Desk)

- 0. Uncertainty Quantification for Ride Quality Mobility Tests using CREATE-GV Mercury
Jeremy Mange*, Sara Boyle
US Army - Ground Vehicle Systems Center, Warren, Michigan, USA
- 0. From Static Graph Attention Generation to Dynamic Graph Attention Coefficient
Tonni Das Jui*, Mary Lauren Benton, Erich Baker
Computer Science Department, Baylor University, Waco, Texas, USA;
Belmont University, Nashville, Tennessee, USA
- 0. Application of Data Science Techniques to Performing Arts
Toshiyuki Maeda*, Masumi Yajima, Akiyoshi Wakatani
Hannan University, Japan
- 0. A Framework for Evaluating Organization Accelerator Success
David Keever
Leidos, Inc., Reston, Virginia, USA
- 0. A Low-Cost Automatic DEF Refueling Controller for Diesel Generators
Dania Mosuli*, Hakduran Koc
College of Science and Engineering, University of Houston-Clear Lake, Houston, Texas, USA
- 0. Design Of an Autonomous Mower and Embedded Microcontroller
Bassam Shaer*, Natalia Dejesus, Tyler Murray, Malcolm Jones
ECE and ME Engineering Departments,
University of West Florida, Fort Walton Beach, Florida, USA
- 0. Leveraging Chatbots for Academic Advising to Help Overcome Advising Challenges
Mel Akhimiemona, James Braman*
Computer Science, Information Technology, Community College of Baltimore County, Baltimore, Maryland, USA

SESSION 7-MON (PDPTA TRACK): MPS - Continued ...

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: INTERNATIONAL WORKSHOP ON MATHEMATICAL MODELING AND PROBLEM SOLVING (MPS)

Co-Chairs: Prof. Masahito Ohue*, Prof. Nobuaki Yasuo, and Prof. Masami Takata*****

*** Tokyo Institute of Technology, Japan**

**** Tokyo Institute of Technology, Japan**

***** Nara Women's University, Japan**

July 22, 2024 (Monday); 03:40pm - 05:40pm

(LOCATION: Ballroom Galleria A)

- 03:40 - 04:00pm: Introducing Competitive Mechanism to Differential Evolution for Numerical Optimization
Rui Zhong*, Enzhi Zhang, Masaharu Munetomo
Graduate School of Information Science and Technology,
Hokkaido University, Sapporo, Japan
- 04:00 - 04:20pm: Hyper-heuristic Differential Evolution with Novel Boundary Repair for Numerical Optimization
Rui Zhong*, Jun Yu, Masaharu Munetomo
Graduate School of Information Science and Technology,
Hokkaido University, Sapporo, Japan
- 04:20 - 04:40pm: Jump Like a Frog: Optimization of Renewable Energy Prediction in Smart Grid Based on Ultra Long Term Network
Xingbang Du*, Enzhi Zhang
Graduate School of Information Science and Technology,
Hokkaido University, Sapporo, Japan
- 04:40 - 05:00pm: Vision Transformer-based Meta Loss Landscape Exploration with Actor-Critic Method
Enzhi Zhang*, Rui Zhong, Du Xingbang, Mohamed Wahib,
and Masaharu Munetomo
Graduate School of Information Science and Technology,
Hokkaido University, Sapporo, Japan
- 05:00 - 05:20pm: Fast Computation Method for Stopping Condition of Range Restricted GMRES Method
Miho Chiyonobu, Masami Takata*, Kinji Kimura, and
Yoshimasa Nakamura
Research Group of Information and Communication Technology
for Life, Nara Women's University, Nara, Japan
- 05:20 - 05:40pm: Implementation of the OQDS Method for Principal Component Analysis
Miho Chiyonobu*, Masami Takata, Kinji Kimura, and
Yoshimasa Nakamura
Graduate school of Humanities and Sciences, Nara Women's
University, Nara, Japan
- 05:40 - 06:00pm: FREE SLOT
- 06:00 - 06:20pm: FREE SLOT
- 07:15 - 09:30pm: **CONFERENCE RECEPTION DINNER / SOCIAL**
July 22 - Monday; 07:15pm
(LOCATION: Velvet Room)

ONLINE / ZOOM SESSIONS

ALL DATES AND TIMES ARE GIVEN IN USA PACIFIC TIME ZONE (PT).

- SESSION 1-ZOOM: ---> FECS + CSC + HIMS + SERP TRACKS**
SCOPE: FRONTIERS IN EDUCATION + SCIENTIFIC COMPUTING +
HEALTH INFORMATICS + SOFTWARE ENGINEERING
Chairs: TBA
July 22, 2024 (Monday); 08:00am - 10:20am
(ON-LINE / ZOOM)
- 08:00 - 08:20am: Structural Health Monitoring for Risk Assessment and Reliability of a Structure After Extreme Loads
Umesh Chand*, Chandrasekhar Putcha
Department of Civil Engineering, Delhi Skill and Entrepreneurship University, New Delhi, India;
Civil and Environmental Engineering Department, California State University, Fullerton, California, USA
- 08:20 - 08:40am: Automatic Wound Detection System for Multi-Ethnic Populations using YOLO
Naveen Varghese Jacob*, Sowmya V., Gopalakrishnan E.A., Riju Ramachandran, Anoop Vasudevan Pillai
Amrita School of Artificial Intelligence, Coimbatore, Amrita Vishwa Vidyapeetham, India; Amrita School of Artificial Intelligence, Bangalore, Amrita Vishwa Vidyapeetham, India; Amrita School of Computing, Bangalore, Amrita Vishwa Vidyapeetham, India; Amrita Institute of Medical Sciences, Kochi, Amrita Vishwa Vidyapeetham, India
- 08:40 - 09:00am: Predictive Modelling for Length of Stay with the MIMIC-III Critical Care Database
Dulan S. Dias*, Adele H. Marshall, Aleksandar Novakovic
School of Mathematics and Physics, Queen's University Belfast, Belfast, UK;
Faculty of Business and IT, Ontario Tech University, Oshawa, Canada
- 09:00 - 09:20am: Exploring the Impact of Social Media on Mental Health and Well-being: A Multi-Dimensional Analysis
Vasit Ali, Cristina Hava Muntean, Abid Yaqoob
School of Computing, National College of Ireland, Dublin, Ireland;
School of Electronic Engineering, Dublin City University, Dublin, Ireland
- 09:20 - 09:40am: Coding Process Visualizations for Improved Learning and Academic Integrity in CS1
Badri Adhikari*, Nirala Lamichhane
Department of Computer Science, University of Missouri-St. Louis, Missouri, USA;
Department of Electronics & Computer Engineering, Tribhuvan University (ACEM), Kathmandu, Nepal

July 22

09:40 - 10:00am: Plan-based and Agile Companies: A Comparison of Project Management Approaches
Ilya Khomyakov, Manuel Mazzara, Ruzilya Mirgalimova,
and Alberto Sillitti*
Innopolis University, Russia Federation;
Centre for Applied Software Engineering, Italy

10:00 - 10:20am: FREE SLOT

- SESSION 2-ZOOM: ---> ICAI, ACC, CSC TRACKS**
SCOPE: ARTIFICIAL INTELLIGENCE + COGNITIVE COMPUTING + SCIENTIFIC COMPUTING
Chairs: TBA
July 22, 2024 (Monday); 10:20am - 01:00pm
(ON-LINE / ZOOM)
- 10:20 - 10:40am: Revisiting the Nexus Between Handwriting and Personality: Graphology
 Yan Xu*, Ching Y. Suen
 Department of CS and SWE, Concordia University, Montreal, Canada;
 School of Journalism and Communication, Shandong Normal University, Jinan, China
- 10:40 - 11:00am: Analysis of the Integration of Artificial Intelligence and Blockchain Technology in a Legal Process in Ecuador
 Diego Gustavo Andrade Armas, Segundo Moises Toapanta Toapanta, Joseph Alexander Guaman Seis, Jose Antonio Orizaga Trejo, Maria Mercedes Bano Hifong, Ma. Rocio Maciel Arellano
 Research Department, External, Independent Investigator, Ibarra, Ecuador;
 Centro de Investigacion Mecatronica y Sistemas Interactivos (MIST), Universidad Tecnologica Indoamerica, Ambato, Ecuador;
 Technology Directorate, Universidad de las Fuerzas Armadas (ESPE), Sangolqui, Ecuador;
 Department of Information Systems, Universidad de Guadalajara (CUCEA-UDG), Guadalajara, Mexico;
 Postgraduate Subsystems, Universidad Catolica de Santiago de Guayaquil (UCSG), Guayaquil, Ecuador
- 11:00 - 11:20am: XAI-based Assessment of Software Vulnerability Contributing Factors in Transformer Models
 Ding Li, Yan Liu*
 Department of Electrical and Computer Engineering, Concordia University, Montreal, Quebec, Canada
- 11:20 - 11:40am: Driving Planner for Freight Trains Using Reinforcement Learning
 Gabriel Jose Costa Barros*, Paulo Andre Lima de Castro
 Autonomous Computational Systems Lab (LABSCA), Aeronautics Institute of Technology (ITA), Sao Jose dos Campos, Brazil
- 11:40a - 12:00p: Causal Discovery with Interactive Human Inputs
 Jin Cao*, Renxiong Liu
 Nokia, Bell Labs, USA;
 Meta Platforms, USA
- 12:00 - 12:20pm: Federated Learning with Frequency Estimation for Smart Meter Systems
 Olivera Kotevska
 Computer Science and Mathematics,
 Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA
- 12:20 - 12:40pm: Restating the Prowess of Logic Programming
 Feng-Jen Yang
 Department of Computer Science,
 Florida Polytechnic University, Lakeland, Florida, USA

July 22

12:40 - 01:00pm: The Strategic Optimization of a Tabletop Role-Playing Game
Zhi Zheng, Nicholas Porter, Toby Hilliard, Feng-Jen Yang*
Data Science and Business Analytics Department,
Florida Polytechnic University, Lakeland, Florida, USA;
Computer Science Department, Florida Polytechnic University,
Lakeland, Florida, USA

July 22

- SESSION 3-ZOOM: ---> BIOCAMP + ACC + ICWN + SAM TRACKS**
SCOPE: BIOINFORMATICS & COMPUTATIONAL BIOLOGY +
COGNITIVE COMPUTING + WIRELESS NETWORKS / SECURITY
Chairs: TBA
July 22, 2024 (Monday); 01:00pm - 03:00pm
(ON-LINE / ZOOM)
- 01:00 - 01:20pm: Dihedral Angle Adherence: Evaluating Protein Structure Predictions in the Absence of Experimental Data
Musa Azeem*, Homayoun Valafar
Department of Computer Science and Engineering,
University of South Carolina, Columbia, USA
- 01:20 - 01:40pm: HIBR: A Hybrid Intelligent Brainwave Recognition Model with Higher Accuracy
Temesgen Alemayehu Tikure*, Md Julfiker Ali Jewel,
David Coleman, Anh Le, Thanh Le, Fred Wu
Department of Math and Computer Science, West Virginia State University, Institute, West Virginia, USA;
Henry M. Gunn High School, Palo Alto, California, USA;
Department of Economic, UEH University, Hochiminh City, Vietnam
- 01:40 - 02:00pm: An Integrated Approach for AI-Assisted Survey Systems Using Deterministic and Nondeterministic Models
Yilian Zhang*, Andrew Hunt
Department of Computer Science, Engineering & Mathematics,
University of South Carolina Aiken, Aiken, South Carolina, USA
- 02:00 - 02:20pm: Infusing Human Feedback into Intermediate Prompting Steps of Large Language Models
Wangfan Li*, Claire Gendron, Carlos Toxtli
Human-AI Empowerment Lab, Clemson University,
Clemson, South Carolina, USA
- 02:20 - 02:40pm: Implementation and Performance Evaluation of a Wireless Covert Channel
Kevin Kwik, Mohammad Husain
Computer Science, Cal Poly Pomona, Pomona, California, USA
- 02:40 - 03:00pm: Adaptive Network Recovery: A Feedback-Driven Approach to Enhancing Resilience Against DDoS Attack
Waseem Al Aqqad, Mais Nijim*, Hisham Albataineh
Electrical and Computer Engineering Department,
West Virginia University, Institute, West Virginia, USA;
Electrical Engineering and Computer Science Department,
Texas A&M University, Kingsville, Texas, USA;
Physics and Geosciences Department, Texas A&M University,
Kingsville, Texas, USA

July 22

- SESSION 4-ZOOM: ---> EEE + IKE HIMS + SERP TRACKS**
SCOPE: E-LEARNING, e-BUSINESS, EIS & E-GOVERNMENT +
INFORMATION & KNOWLEDGE ENGINEERING +
HEALTH INFORMATICS + SOFTWARE ENGINEERING
Chairs: TBA
July 22, 2024 (Monday); 03:00pm - 05:20pm
(ON-LINE / ZOOM)
- 03:00 - 03:20pm: The Shifting Landscape of Cybersecurity: The Impact of Remote Work and COVID-19 on Data Breach Trends
Murat Ozer*, Yasin Kose, Mehmet Bastug, Goksel Kucukkaya, and Eva Ruhsar Varlioglu
School of Information Technology, University of Cincinnati, Cincinnati, Ohio, USA;
Friedrich-Alexander-Universitat, Cybercrime and Forensic Computing, Erlangen, Germany;
CJ and Criminology Department, University of Scranton, Scranton, PA, USA;
School of Criminal Justice, University of Cincinnati, Cincinnati, Ohio, USA
- 03:20 - 03:40pm: A Systems Approach to Improving e-Learning using Theory of Constraints
Nancy Oley, Murthy Cheruvu, Vikas Ashok, Ravi Mukkamala
Medgar Evers College, CUNY, Brooklyn, New York, USA;
Hopewell Junction, New York, USA;
Old Dominion University, Norfolk, Virginia, USA
- 03:40 - 04:00pm: The Fast Food Review Online
Jack Taylor, Zizhong John Wang*
Department of Computer Science, Virginia Wesleyan University, Virginia Beach, Virginia, USA
- 04:00 - 04:20pm: An Online Bookstore Design and Implementation
Jacob Wilson, Zizhong John Wang*
Department of Computer Science, Virginia Wesleyan University, Virginia Beach, Virginia, USA
- 04:20 - 04:40pm: Experimental Study on Assistive System using Statistical Signal Processing Technology for Visually Impaired People
Shunji Shimizu*, Masaya Hori, Hiroaki Inoue, Fumikazu Miwakeichi, Nobuhide Hirai, Senichiro Kikuchi, and Satoshi Kato
Suwa University of Science, Chino, Japan;
The Institute of Statistical Mathematics, Tachikawa, Japan;
Tokyo Medical and Dental University, Bunkyo, Japan;
Gunma University, Maebashi, Japan;
Jichi Medical University, Shimotsuke, Japan
- 04:40 - 05:00pm: Experimental Study on Evaluation Method of Orientation and Mobility Skills for Visually Impaired People based on Brain Activity
Masaya Hori*, Shunji Shimizu, Hiroaki Inoue, Yoshikazu Seki, Eiju Watanabe, Shiro Suda, Satoshi Kato
Suwa University of Science, Chino, Japan;
National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan;
Jichi Medical University, Shimotsuke, Japan

July 22

- 05:00 - 05:20pm: Development of a Desktop Agent System Using GPT
Takahiro Ando*, Shintaro Sakamoto
Faculty of Informatics, Gunma University, Gunma, Japan;
Graduate School of Science and Technology,
Gunma University, Gunma, Japan
- SESSION 5-ZOOM: ---> IPCV TRACK**
SCOPE: IMAGE PROCESSING, COMPUTER VISION, &
PATTERN RECOGNITION
Chairs: TBA
July 22, 2024 (Monday); 05:20pm - 06:20pm
(ON-LINE / ZOOM)
- 05:20 - 05:40pm: Contour Detection of Seeds Based on Traditional and
Convolutional Neural Network (CNN) Based Algorithms
Kai Zhao, Mitchell L. Neilsen
Department of Computer Science, Kansas State University,
Manhattan, Kansas, USA
- 05:40 - 06:00pm: Mobility Anomaly Detection with Video Surveillance
Fatemeh Ebrahimi*, Jacqueline Rousseau, Jean Meunier
Department of Computer Science and Operations Research,
University of Montreal, Montreal, Canada;
School of Rehabilitation, University of Montreal,
Montreal, Canada
- 06:00 - 06:20pm: Towards Elephants Intelligent Monitoring in Zakouma
National Park, Chad
Oumar Hassan, Daouda Ahmat, Azza Youssouf, and
Alladoubaye Ngueilbaye
Virtual University of Chad, N'Djamena, Chad;
University of N'Djamena, N'Djamena, Chad;
Shenzhen University, Shenzhen, China

July 23

07:00a - 05:00p: REGISTRATION
(LOCATION: Galleria B & C; Registration Counter/Desk)

<----- LOCATION: Ballrooms Galleria D & E ----->

08:20 - 09:00am: TUTORIAL/KEYNOTE - July 23, Tuesday:
EXPLAINING THE DESIGN OF THE QUANTUM FOURIER TRANSFORM
Prof. Leon Deligiannidis
Professor & Interim Dean
School of Computing and Data Science,
Wentworth Institute of Technology, Massachusetts, USA
(LOCATION: Galleria D & E)

SESSION 8-TUE (CSC TRACK):
(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: MILITARY AND DEFENSE MODELING AND SIMULATION
Co-Chairs: Prof. Douglas D. Hodson (Chair)*,
Prof. Michael R. Grimaila**, Dr. Torrey J. Wagner***
* Computer Science and Engineering Department, US Air Force
Institute of Technology (AFIT), USA
** Head, Systems Engineering & Management Department,
US Air Force Institute of Technology (AFIT), USA
***Data Analytics, supporting the AFIT/EN Data Analytics
graduate certificate program
July 23, 2024 (Tuesday); 09:00am - 10:20am
(LOCATION: Galleria D & E)

09:00 - 09:20am: Performance Evaluation of Utilizing Rust for PCAP Analysis
in Satellite Cybersecurity
Samual M. Asher*, Douglas D. Hodson
The Air Force Institute of Technology, WPAFB, Ohio, USA

09:20 - 09:40am: Austere Runway Simulated Identification
Luke H. Boyd*, Douglas D. Hodson
The Air Force Institute of Technology, WPAFB, Ohio, USA

09:40 - 10:00am: Using Rhai to Create & Benchmark Bevy Entities
John H. Hardy*, Douglas D. Hodson
The Air Force Institute of Technology, WPAFB, Ohio, USA

10:00 - 10:20am: BREAK (Refreshments)
July 23, 2024 (Tuesday)
(LOCATION: Galleria B & C; Registration Counter/Desk)

SESSION 9-TUE (CSC TRACK): Continued ...

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: MILITARY AND DEFENSE MODELING AND SIMULATION

Co-Chairs: Prof. Douglas D. Hodson (Chair)*,

Prof. Michael R. Grimaila, Dr. Torrey J. Wagner*****

*** Computer Science and Engineering Department, US Air Force
Institute of Technology (AFIT), USA**

**** Head, Systems Engineering & Management Department,
US Air Force Institute of Technology (AFIT), USA**

*****Data Analytics, supporting the AFIT/EN Data Analytics
graduate certificate program**

July 23, 2024 (Tuesday); 10:20am - 12:40pm

(LOCATION: Galleria D & E)

- 10:20 - 11:00am: PyQ3: Building Python Extension Modules in Native Rust with Performance and Safety in Mind
Price D. Johnson*, Douglas D. Hodson
The Air Force Institute of Technology, WPAFB, Ohio, USA
- 11:00 - 11:20am: Leveraging Python Interpreters for Concurrency in SeQUeNcE
Brett M. Martin*, Michael R. Grimaila, Douglas D. Hodson
The Air Force Institute of Technology, WPAFB, Ohio, USA
- 11:20 - 11:40am: Benchmark Performance of a Rust-based Python Extension
Ethan J. Schofield*, Douglas D. Hodson
The Air Force Institute of Technology, WPAFB, Ohio, USA
- 11:40 - 12:00pm: Quantum Error Correction in Repetition Codes
James A. Williams*, Douglas D. Hodson
The Air Force Institute of Technology, WPAFB, Ohio, USA
- 12:00 - 12:20pm: Investigating Selective Reliability with the Laminar Networking Package
Ryan D. Winz*, Douglas D. Hodson
The Air Force Institute of Technology, WPAFB, Ohio, USA
- 12:20 - 12:40pm: A Bell State Measurement Throughput Analysis Using Linear Quantum Optics
Kurt T. Spranger*, Michael R. Grimaila, Douglas D. Hodson
The Air Force Institute of Technology, WPAFB, Ohio, USA
- 12:40 - 01:20pm: LUNCH (On Your Own)

SESSION 10-TUE (IPCV TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: IMAGE PROCESSING, COMPUTER VISION, & PATTERN RECOGNITION

Co-Chairs: TBA

July 23, 2024 (Tuesday); 01:20pm - 03:00pm

(LOCATION: Galleria D & E)

- 01:20 - 01:40pm: Computer-Aided Industrial Inspection for Manual Tools using Computer Vision Technologies
Hong-Dar Lin*, Cheng-Kai Jheng
Department of Industrial Engineering and Management,
Chaoyang University of Technology, Taichung, Taiwan
- 01:40 - 02:00pm: Improving Accuracy of Image Clustering using Convolutional Neural Network and Learning from Confusion
Md Farhad Mokter, JungHwan Oh*
Department of Computer Science and Engineering,
University of North Texas, Denton, Texas, USA
- 02:00 - 02:20pm: Analysis of Driver Attention to Objects While Driving
Kolby Sarson, Michael Bauer*
Department of Computer Science, The University of Western
Ontario, London, Ontario, Canada
- 02:20 - 02:40pm: Novel Method to Investigate Decay in Rotting Bananas Using RGB Color Images
Unal McLauchlan, Mehrube Mehrubeoglu*, Lifford McLauchlan
W. B. Ray, Corpus Christi, Texas, USA;
Texas A&M University - Corpus Christi, Texas, USA;
Texas A&M University - Kingsville, Texas, USA
- 02:40 - 03:00pm: Early Detection of Lameness in Dairy Cattle Using Activity Data, Image Analysis, AI and ML - An Approach for Improved Animal Welfare and Economic Impact
Chandrasekar Vuppalapati*, Anitha Ilapakurthi,
Sandhya Vissapragada, Sharat Kedari*, Sriya Vuppalapati,
Santosh Kedari, Jaya Shankar
San Jose State University, San Jose, California, USA;
Hanumayamma Innovations and Technologies, Inc.,
Fremont, California, USA

03:00 - 03:40pm: **BREAK (Refreshments) & POSTERS**

July 23, 2024 (Tuesday)

(LOCATION: Galleria B & C; Registration Counter/Desk)

- 0. Leveraging Deep Learning for Predictive Maintenance in Manufacturing
Tebasu Lisangi, Floribert Monga
LSG Consulting Group Inc., Toronto, Ontario, Canada
- 0. Identifying and Displaying EdTech Implementation Context Profiles
Brian Wright*, Christine Tomasik, Ali Rivera
School of Data Science, University of Virginia,
Charlottesville, Virginia, USA;
InnovateEdU, New York City, New York, USA
- 0. Enhancing Cancer Cell Detection in H&E Images through AI
Ryan Z. Cheng
Harvard-Westlake School, USA
- 0. Enhancing Supply Chain Operations with Machine Learning Forecasts
P. Rodriguez, P. Gonzalez, M. Luna*, B. Ponte
Escuela Politecnica de Ingenieria de Gijon, Campus de Viesques s/n, Gijon (Asturias), Spain
- 0. Sovereign Road Funds: Leveraging Financing for Sustainable Infrastructure in Emerging Markets
J. Martinez, S. Fernandez-Vazquez, R. Rosillo,
D. de la Fuente
Escuela Politecnica de Ingenieria de Gijon, Campus de Viesques s/n, Gijon (Asturias), Spain
- 0. Some Examples of the Use of knowledge Engineering for a Better Exploitation of Massive Company Data
C. Vegega, F. Pollo-Cataneo, J. A. Olivas
GEMIS Research Team, National Technological University,
Regional Faculty Buenos Aires, Buenos Aires, Argentina
- 0. Human-Centered Industry 5.0: Enhancing Supply Chain Resilience and Sustainable Practices
O. Leon, B. Kanat, J. Puente, I. Fernandez
Escuela Politecnica de Ingenieria de Gijon, Campus de Viesques s/n, Gijon (Asturias), Spain

SESSION 11-TUE (ESCS TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: EMBEDDED SYSTEMS, CYBER-PHYSICAL SYSTEMS, & APPLICATIONS

Co-Chairs: TBA

July 23, 2024 (Tuesday); 03:40pm - 05:00pm

(LOCATION: Galleria D & E)

- 03:40 - 04:00pm: Reliable I/F Circuit for Embedded Self-Timed Data-Driven Processors
Riku Uemoto, Makoto Iwata
Graduate School of Engineering, Kochi University of Technology, Kami, Kochi, Japan;
School of Informatics, Kochi University of Technology, Kami, Kochi, Japan
- 04:00 - 04:20pm: Using Heuristics and Byte Histograms to Detect Anomalies in OT Network Traffic
Philip Rahal, Jack Nunnelee, Alex Howe, Mauricio Papa
The University of Tulsa, Tulsa, Oklahoma, USA
- 04:20 - 04:40pm: Analytical Study of Attacks and Defenses for IoT in Critical Infrastructure
Ali Al-Sinayyid*, Timothy Sanford Ii, Alexander Sanchez, Kadiyala Sasidhar, Venkatesh Mannuru, Rohith Reddy Battula
Department of Mathematics and Computer Science, West Virginia State University, Institute, West Virginia, USA
- 04:40 - 05:00pm: Enhancing Cybersecurity in Industrial Internet of Things: Machine Learning-based Approaches for Cyber-attack Detection in a Real-world Testbed Environment
Cayden Scott Cather, Eman Hammad, Yuehua Wang
Computer Science Department, Texas A&M University-Commerce, Commerce, Texas, USA;
Engineering Technology and Industrial Distribution, Texas A&M University, College Station, Texas, USA

July 23

SESSION 12-TUE (ICOMP TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: INTERNET COMPUTING & IOT + RELATED TOPICS

Co-Chairs: TBA

July 23, 2024 (Tuesday); 05:00pm - 06:00pm

(LOCATION: Galleria D & E)

- 05:00 - 05:20pm: Towards Implementation of Privacy-preserving Federated Learning Aggregation using Multi-key Homomorphic Encryption
Svetlana Boudko
DART, Norwegian Computing Center, Oslo, Norway
- 05:20 - 05:40pm: The Vital Role of Small and Marginal Farmer in Future of our Climate: Democratization of Machine Learning, Artificial Intelligence, and Dairy Cow Necklace Sensors in Achieving the UN Climate Change Goals (COP21) and the Paris Agreement
Chandrasekar Vuppalapati*, Anitha Ilapakurti*, Sandhya Vissapragada, Vanaja Mamidi, Sriya Vuppalapati, Akshay Vuppalapati, Sharat Kedari, Santosh Kedari, Jaya Vuppalapati, Karthik Kallakur, Koduru Rajasri, Narendra Lella
Computer Engineering (CMPE Department), San Jose State University, San Jose, California, USA;
Hanumayamma Innovations and Technologiesa PVT Limited, Hyderabad, India; Hanumayamma Innovations and Technologies, Inc., Fremont, California, USA;
- 05:40 - 06:00pm: MultiDrone Simulator - An Open Source Multi-Plataform Tool to Use in Tests of Optimized Flight of Group of Drones
Robison Cris Brito*, Huilson Jose Lorenzi, Alfredo Weitzenfeld, and Eduardo Todt
Federal University of Technology, UTFPR, Brazil;
Univeristy of South Florida, USF, Florida, USA
- 06:00 - 06:20pm: FREE SLOT

<----- LOCATION: Ballroom Galleria A ----->

SESSION 13-TUE (BIOCOMP & BIOENG TRACKS):
(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

**SCOPE: BIOINFORMATICS & COMPUTATIONAL BIOLOGY +
BIOMEDICAL ENGINEERING**

Co-Chairs: TBA

July 23, 2024 (Tuesday); 09:00am - 10:00am

(LOCATION: Ballroom Galleria A)

- 09:00 - 09:20am: Early Alzheimer's Detection: Bidirectional LSTM and Attention Mechanisms in Eye Tracking
Mehdi Ghayoumi*, Kambiz Ghazinour
CyberSecurity Department, SUNY at Canton, New York, USA
- 09:20 - 09:40am: Synthetic Generation of Escape Sequences for Escape-prediction of SARS-COV-2
Prem Singh Bist*, Hilal Tayara, Kil To Chong
Department of Electronics & Information Engineering,
Jeonbuk National University, South Korea
- 09:40 - 10:00am: Rethinking Transfer Learning for Histopathology Cancer Detection: HistoNet
Ankur Yadav, Ovidiu Daescu
Department of Computer Science, The University of Texas
at Dallas, Richardson, Texas, USA
- 10:00 - 10:20am: **BREAK (Refreshments)**
July 23, 2024 (Tuesday)
(LOCATION: Galleria B & C; Registration Counter/Desk)

July 23

SESSION 14-TUE (FECS & EEE TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

**SCOPE: FRONTIERS IN EDUCATION: CS & CS +
E-LEARNING, E-BUSINESS, EIS, & E-GOVERNMENT**

Co-Chairs: TBA

July 23, 2024 (Tuesday); 10:20am - 12:20pm

(LOCATION: Ballroom Galleria A)

- 10:20 - 11:00am: A Longitudinal Study to Investigate the Impact of a Service-Learning Course on Its Participants
Xin Xu*, Wei Jin, Rahaf Barakat, Sonal Dekhane, Cengiz Gunay, Anca Doloc Mihi, Cindy Robertson
Georgia Gwinnett College, Georgia, USA
- 11:00 - 11:20am: A Personal Tutoring Bot With VR/AR Tools
Juan (Andy) Wang
School of ICCS, Northern Arizona University, Flagstaff, Arizona, USA
- 11:20 - 11:40am: Industry Sabbaticals in Computing: Motivation and Preparation
Mark C. Lewis, Lisa L. Lacher, Zachary Kurmas
Department of Computer Science, Trinity University, San Antonio, Texas, USA;
College of Computing, Grand Valley State University, Allendale, Michigan, USA
- 11:40 - 12:00pm: Navigating Challenges in E-participation: A Comprehensive Meta-Analysis
Mayssa Bougherra, Abdul Khaliq Shaikh*, Saranjam Baig, and Naresh Adhikari*
Northumbria University, Newcastle upon Tyne, United Kingdom; Department of Information Systems, Sultan Qaboos University, Muscat, Oman; Department of Political Science, Sultan Qaboos University, Muscat, Oman; Slippery Rock University of Pennsylvania, Pennsylvania, USA
- 12:00 - 12:20pm: Metrology Training for EE/CE Students
Juan (Andy) Wang
School of SICCS, Northern Arizona University, Flagstaff, Arizona, USA
- 12:20 - 01:20pm: LUNCH (On Your Own)

July 23

SESSION 15-TUE (GCC + PDPTA + IC DATA TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: CLOUD COMPUTING + HPC + DATA SCIENCE + EDGE COMPUTING

Co-Chairs: TBA

July 23, 2024 (Tuesday); 01:20pm - 03:20pm

(LOCATION: Ballroom Galleria A)

- 01:20 - 01:40pm: Enhancing Data Security with Decentralized Cloud Storage:
An IPFS Approach
Ajinkya Prabhu Jadhav, Sushanth S. Manakhari
Department of Computer and Information Science,
Gannon University, Erie, PA, USA
- 01:40 - 02:00pm: Parallel N-Body Performance Comparison: Julia, Rust, and More
Mark C. Lewis*, Clarissa Garcia, Audrey Tollett,
Seven Aguirre, Henry Hafner, John McMahon, Amanda Sickafoose
Computer Science, Trinity University, San Antonio, Texas, USA;
Planetary Science Institute, Tuscon, Arizona, USA
- 02:00 - 02:20pm: Accelerating Cloud Database Recovery for Providing Real-time
Service After a Cyberattack
Brajendra Panda*, Noah Buchanan
Electrical Engineering and Computer Science Department,
University of Arkansas, Fayetteville, Arkansas, USA
- 02:20 - 02:40pm: Using Minicasts for Efficient Asynchronous Causal Unicast and
Byzantine Tolerance
Laine Rumreich*, Paolo A.G. Sivilotti
Department of Computer Science and Engineering,
The Ohio State University, Columbus, Ohio, USA
- 02:40 - 03:00pm: An Edge Computing Architecture for Autonomous Vehicles
Hassan Rajaei*, Sai Anusha Kodali, Niharika Mulinti
Department of Computer Science, Bowling Green State University,
Bowling Green, Ohio, USA
- 03:00 - 03:20pm: Big Data Techniques in Mobile Cloud Networks for Healthcare:
A Survey of Challenges, Opportunities, and Future Directions
Saleh Al-Sharaeh*, Bulqais M M Alenezi
King Abdullah II School of Information Technology,
Department of Computer Science, The University of Jordan,
Amman, Jordan

03:20 - 03:40pm: **BREAK (Refreshments) & POSTERS**

July 23, 2024 (Tuesday)

(LOCATION: Galleria B & C; Registration Counter/Desk)

- 0. Leveraging Deep Learning for Predictive Maintenance in Manufacturing
Tebasu Lisangi, Floribert Monga
LSG Consulting Group Inc., Toronto, Ontario, Canada
- 0. Identifying and Displaying EdTech Implementation Context Profiles
Brian Wright*, Christine Tomasik, Ali Rivera
School of Data Science, University of Virginia,
Charlottesville, Virginia, USA;
InnovateEdU, New York City, New York, USA
- 0. Enhancing Cancer Cell Detection in H&E Images through AI
Ryan Z. Cheng
Harvard-Westlake School, USA
- 0. Enhancing Supply Chain Operations with Machine Learning Forecasts
P. Rodriguez, P. Gonzalez, M. Luna*, B. Ponte
Escuela Politecnica de Ingenieria de Gijon, Campus de
Viesques s/n, Gijon (Asturias), Spain
- 0. Sovereign Road Funds: Leveraging Financing for Sustainable Infrastructure in Emerging Markets
J. Martinez, S. Fernandez-Vazquez, R. Rosillo,
D. de la Fuente
Escuela Politecnica de Ingenieria de Gijon, Campus de
Viesques s/n, Gijon (Asturias), Spain
- 0. Some Examples of the Use of knowledge Engineering for a Better Exploitation of Massive Company Data
C. Vegega, F. Pollo-Cataneo, J. A. Olivas
GEMIS Research Team, National Techological University,
Regional Faculty Buenos Aires, Buenos Aires, Argentina
- 0. Human-Centered Industry 5.0: Enhancing Supply Chain Resilience and Sustainable Practices
O. Leon, B. Kanat, J. Puente, I. Fernandez
Escuela Politecnica de Ingenieria de Gijon, Campus de
Viesques s/n, Gijon (Asturias), Spain

SESSION 16-TUE (ICAI TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: ARTIFICIAL INTELLIGENCE AND APPLICATIONS

Co-Chairs: TBA

July 23, 2024 (Tuesday); 03:40pm - 04:40pm

(LOCATION: Ballroom Galleria A)

- 03:40 - 04:00pm: An Analysis of Different Information Granularity Distribution Protocols to Improve Consistency in Intuitionistic Reciprocal Preference Relations
Juan Carlos Gonzalez-Quesada, Francisco Javier Cabrerizo, Sergio Alonso Burgos, Juan Antonio Morente-Molinera, Ignacio Javier Perez, Enrique Herrera-Viedma
Department of Computer Science and Artificial Intelligence, University of Granada, Spain;
Department of Software Engineering, University of Granada, Spain
- 04:00 - 04:20pm: Demand Forecasting in Planned Production Orders Using a Dual-Path Time Series Decomposition and Fusion Multi-Level Ensemble Model
Sheng-Tzong Cheng, Chang-Ching Li, Ya-Jin Lyu
Computer Science and Information Engineering,
National Cheng Kung University, Tainan, Taiwan;
Department of Master Degree Program on Artificial Intelligence,
National Cheng Kung University, Tainan, Taiwan
- 04:20 - 04:40pm: Enhancing Smart Home Security: A Robust Voice Authentication Framework Using K-Nearest Neighbors on IoT Devices
Ajinkya Prabhu Jadhav, Sushanth S. Manakhari
Department of Computer and Information Science,
Gannon University, Erie, PA, USA

SESSION 17-TUE (HIMS + BIOENG TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: HEALTH INFORMATICS + BIOMEDICAL ENGINEERING

Co-Chairs: TBA

July 23, 2024 (Tuesday); 04:40pm - 06:00pm

(LOCATION: Ballroom Galleria A)

- 04:40 - 05:00pm: Comparing Models for Sentiment Analysis of Tweets in Response to Public Health Announcements during the Pandemic
 Kristina Kacmarova, Heather McPhail, Anita Kothari, Lesley James, Lindsay Foisey, Lorie Donelle, Michael Bauer*
 Department of Computer Science, University of Western Ontario, London, Canada; School of Health Studies, University of Western Ontario, London, Canada;
 School of Health Studies, University of Waterloo, Ontario, Waterloo, Canada;
 College of Nursing, University of South Carolina, Columbia, South Carolina, USA
- 05:00 - 05:20pm: Integrating HRV and Activity Data for ADHD Classification Using Machine Learning Methodologies
 Yanqing Ji, Janet Zhang-Lea, John Tran
 Department of Electrical & Computer Engineering, Gonzaga University, Spokane, Washington, USA;
 Department of Human Physiology, Gonzaga University, Spokane, Washington, USA;
 Department of Psychiatry and Behavioral Science, University of California, San Francisco, California, USA
- 05:20 - 05:40pm: Challenges and Opportunities in a Big Data Pipeline for Resilience and Wellness Development: A Case Study for Police Training
 Tina Cloutier, Carolyn McGregor, Judith Andersen
 Joint Research Centre in AI for Health and Wellness, Ontario Tech University, Oshawa, ON, Canada;
 University of Technology Sydney, Australia;
 Department of Psychology & Affiliated Temerty Faculty of Medicine, University of Toronto, Mississauga, ON, Canada
- 05:40 - 06:00pm: White Blood Cell Nuclei Detection and Segmentation on Ratio Channels G/B, B/G, and B/R for FPGA Implementation
 Roberto C. Araujo-Parra, Aura M. Jimenez-Garduno, and Jorge F. Martinez-Carballido
 Electronics Department, INAOE, Santa Ma. Tonantzintla, Mexico;
 Health Sciences Department, UDLAP, San Andres Cholula, Mexico
- 06:00 - 06:20pm: FREE SLOT

ONLINE / ZOOM SESSIONS

ALL DATES AND TIMES ARE GIVEN IN USA PACIFIC TIME ZONE (PT).

- SESSION 6-ZOOM: ---> ICAI + BIOCOMP + FECS + SAM TRACKS**
SCOPE: ARTIFICIAL INTELLIGENCE + COMPUTATIONAL BIOLOGY +
EDUCATION + SECURITY
Chairs: TBA
July 23, 2024 (Tuesday); 08:00am - 10:20am
(ON-LINE / ZOOM)
- 08:00 - 08:20am: Smart Farming: Leveraging a Deep Learning Model for Plant Leaf Classification
 Shahd Alomani, Mai Almdahrsh, Shareefah Alessa, Anas Bushnag*, Atif Oyouni
 Department of Computer Science, University of Tabuk, Tabuk, Saudi Arabia;
 Department of Computer Engineering, University of Tabuk, Tabuk, Saudi Arabia;
 Department of Biology, Biodiversity Genomics Unit, University of Tabuk, Tabuk, Saudi Arabia
- 08:20 - 08:40am: Lung and Colon Cancer Classification Based on a Hybrid Deep Convolutional Neural Networks of Xception, VGG-16, and VGG-19 using Histopathological Images
 Amal O. Hasan, Zakariya A. Oraibi
 Department of Computer Science, College of Education for Pure Sciences, University of Basrah, Basrah, Iraq
- 08:40 - 09:00am: Leveraging Chat-GPT to Generate Educational Assessment Materials for Software Engineering
 Vasilii Seibert, Tobias Geger, Andreas Rausch
 Clausthal University, Institute for Software and Systems Engineering (ISSE), Clausthal-Zellerfeld, Germany
- 09:00 - 09:20am: Analysis and Improvement of MixColumn Operations in the Advanced Encryption Standard Algorithm
 Kwame Assa-Agyei*, Kayode Owa, Tawfik Al-Hadhrami
 Department of Computer Science, Nottingham Trent University, Nottingham, UK
- 09:20 - 09:40am: An Efficient Generation of Prime Numbers for RSA Encryption Scheme
 Kwame Assa-Agyei*, Kayode Owa, Tawfik Al-Hadhrami
 Department of Computer Science, Nottingham Trent University, Nottingham, UK
- 09:40 - 10:00am: Easy: Encryption-less Anonymity System
 Adoum Youssouf, Daouda Ahmat*, Mahamat Borgou
 Virtual University of Chad, N.Djamena, Chad;
 University of N.Djamena, N.Djamena, Chad;
 ICT National School, N.Djamena, Chad
- 10:00 - 10:20am: Intelligent Methods for Android Malware Detection: A Survey
 Marayi Choroma, Daouda Ahmat, Bakari Abbo
 University of N.Djamena, N.Djamena, Chad

July 23

- SESSION 7-ZOOM: ---> ICOMP + MSV + FECS + ICAI TRACKS**
SCOPE: INTERNET COMPUTING & IOT + MODELING, SIMULATION & VISUALIZATION METHODS + EDUCATION + ARTIFICIAL INTELLIGENCE
Chairs: TBA
July 23, 2024 (Tuesday); 10:20am - 12:20pm
(ON-LINE / ZOOM)
- 10:20 - 10:40am: Harnessing Social Robotics and the Internet Of Things to Reduce the Risk of Older Adults Developing Hypothermia and Dehydration
Hani Sindi*, Rachel McCrindle
Biomedical Engineering, University of Reading, Reading, UK
- 10:40 - 11:00am: Improving Critical Controls Using IoT and Computer Vision
Michael Kainola, Larbi Esmahi*, Ali Dewan
School of Computing & Information Systems,
Athabasca University, Canada
- 11:00 - 11:20am: Federated Threat Detection within Intelligence Sharing Organizations While Maintaining Privacy
Genea Taylor*, David Johnson, Kaushik Roy
Department of Computer Science, North Carolina Agricultural and Technical State University, Greensboro, NC, USA
- 11:20 - 11:40am: Data Clustering and Visualization with Recursive Max k-Cut Algorithm
An Ly*, Raj Sawhney, Marina Chugunova
Institute of Mathematical Sciences, Claremont Graduate University, Claremont, California, USA
- 11:40a - 12:00p: To Hack or Not to Hack? Connecting Cybersecurity, the IoT, and Smart Environments to K12 Learning Experiences
Shusmoy Chowdhury, Debaleen Das Spandan, Tara Bonebrake*, Zachary Frantsen, Ajay Katangur*
The Summit Preparatory School, Springfield, Missouri, USA;
Marion C. Early High School, Springfield, Missouri, USA
Department of Computer Science, Missouri State University, Springfield, Missouri, USA;
- 12:00 - 12:20pm: Explainable Machine Learning based Intrusion Detection Systems for IoT
Amun Jackson*, Maria Camila Gaitan-Cardenas, Kaushik Roy, Bernard Aldrich, Janelle Mason
Department of Computer Science, North Carolina A&T State University, Greensboro, North Carolina, USA

- SESSION 8-ZOOM: ---> BIOENG + ICAI + ICDATA TRACKS**
SCOPE: BIOMEDICAL ENGINEERING + MOBILE COMPUTING +
ARTIFICIAL INTELLIGENCE AND APPLICATIONS
Chairs: TBA
July 23, 2024 (Tuesday); 12:20pm - 02:20pm
(ON-LINE / ZOOM)
- 12:20 - 12:40pm: Classifying Network Traffic using Images and Deep Convolutional Neural Networks
 Qaylin I. Holliman, R. E. Davis, Jr., Jinsheng Xu, Kaushik Roy
 Computer Science Department, North Carolina A&T State University, Greensboro, North Carolina, USA
- 12:40 - 01:00pm: MobiVitalsConnect: A Comprehensive Mobile Healthcare System for Real-Time Patient Monitoring and Data Visualization
 Sasipriya Arun, Edward R. Sykes*, Syed Tanbeer
 Centre for Applied AI, Sheridan College, Oakville, Ontario, Canada
- 01:00 - 01:20pm: Explainable Machine Learning Approach for Intelligent Edits of Medicaid Home Healthcare Services Claims
 Ephina Thendral Surendranath
 Conduent Inc., USA
- 01:20 - 01:40pm: Dual-Approach Interpretations of Bailout Strategies in the Eisenberg-Noe Model
 Jiashan Wu*, Zhiqian Chen
 Mississippi State University, USA
- 01:40 - 02:00pm: Enhancing Cultural Algorithm Guided Policy Gradient with Parameter Exploration through Topographic Knowledge and Adaptive Weighting
 Mark Nuppua, Khalid Kattan, Robert G. Reynolds*
 Computer Science, College of Engineering, Wayne State University, Detroit, Michigan, USA;
 Computer Science, College of Engineering, University of Michigan-Dearborn, Dearborn, Michigan, USA;
 Museum of Anthropological Archaeology, University of Michigan-Ann Arbor, Ann Arbor, Michigan, USA
- 02:00 - 02:20pm: Assessing the Impact of Homelessness on COVID-19 Hospitalization Rates in Patients with Underlying Medical Conditions through Explainable AI
 J. M. Imtinan Uddin*, Yingfeng Wang, Hong Qin, Hayden Hall, Jessica Long, Connor Kimbrell, Isabel Obrien, Sudave Mendiratta, Patrick Koo
 University of Tennessee at Chattanooga, Tennessee, USA

July 23

- SESSION 9-ZOOM: FCS + PDPTA + GCC + ICAI TRACKS**
SCOPE: PARALLEL & DISTRIBUTED PROCESSING TECHNIQUES & APPLICATIONS + ALGORITHMS + CLOUD, & CLUSTER COMPUTING + ARTIFICIAL INTELLIGENCE
Chairs: TBA
July 23, 2024 (Tuesday); 02:20pm - 04:00pm
(ON-LINE / ZOOM)
- 02:20 - 02:40pm: Searching Real Numbers in Constant Time
Sreelatha Deebaguntla, Yijie Han
School of Science and Engineering, University of Missouri
at Kansas City, Kansas City, Missouri, USA
- 02:40 - 03:00pm: Towards Automatic, Predictable and High-Performance Parallel Code Generation
Lenore Mullin, Gaetan Hains*
University of Albany, Albany, New York, USA;
LACL, Universite Paris-Est, Creteil, France
- 03:00 - 03:20pm: Scientific Workflow Provenance Management: System Requirements and a Reference Architecture
Andre Kashliev
Department of Computer Science, Eastern Michigan University,
Ypsilanti, Michigan, USA
- 03:20 - 03:40pm: Enhancing Differential Evolution for Neural Network Optimization through Boundary Individual Consideration
Mandar Angchekar*, Chilukuri K. Mohan
Department of EECS, Syracuse University,
Syracuse, New York, USA
- 03:40 - 04:00pm: Utilizing Federated Learning and SHAP for Predictive Analysis in Smart Grid Security
Sushmitha Halli Sudhakara, Lida Haghnegahdar,
Mohammad Ghasemigol, Daniel Takabi
Department of Computer Science, Old Dominion University,
Virginia, USA;
School of Cybersecurity, Old Dominion University, Virginia, USA

July 23

- SESSION 10-ZOOM: FECS + SERP + ICWN TRACKS**
SCOPE: EDUCATION + SOFTWARE ENGINEERING + WIRELESS NETWORKS
Chairs: TBA
July 23, 2024 (Tuesday); 04:00pm - 06:20pm
(ON-LINE / ZOOM)
- 04:00 - 04:20pm: Assessing ABET Outcomes Through a Software Engineering Capstone Course
Tauqeer Hussain
Department of Computer Science and Information Technology,
Kutztown University of Pennsylvania, Kutztown, Pennsylvania, USA
- 04:20 - 04:40pm: Traffic Analysis of Online Video Games
Shengli Yuan*, Joel Trevizo
Department of Computer Science and Engineering Technology,
University of Houston - Downtown, Houston, Texas, USA
- 04:40 - 05:00pm: Curriculum for a New Academic Program with Bachelor's Degrees in Intelligent Systems Engineering and Computer Engineering
Ashu M. G. Solo
Maverick Trailblazers Inc., Wilmington, Delaware, USA
- 05:00 - 05:20pm: Tertiary Mathematics Students in Different Learning Environments for the Same Subject: Perceptions and Achievement
Mary Ruth Freislich*, Alan Bowen-James
School of Mathematics and Statistics, University of New South Wales, Sydney, Australia;
Crown Institute of Higher Education, Sydney, Australia
- 05:20 - 05:40pm: VENUS: Designing a Validation Engine for User Stories
James Anthony Sammut*, Xin Xiang, Yue Song, Yuchen Cao, and Leon Sterling
School of CIS, The University of Melbourne, Melbourne, Australia; Buildkite, Australia
- 05:40 - 06:00pm: Optimizing Fuzzy Comprehensive Evaluation of Teaching Quality Using Elastic Proximity
Jianjun Wang*, Xiaohua Zhao, Zichun Wang, Fred Wu
School of Electronic and information,
Hunan First Normal University, Changsha, China;
Faculty of Education, Tianjin Normal University, China;
Department of Mathematics and Computer Science,
West Virginia State University, Institute, West Virginia, USA
- 06:00 - 06:20pm: Wireless Sensor Networks Using Biorobotic Sensors: Frameworks and Applications
Deok Hee Nam
Engineering and Computer Science, Wilberforce University,
Wilberforce, Ohio, USA

<----- LOCATION: Ballroom Galleria D ----->

SESSION 18-WED (HIMS + ICDATA + ICAI TRACKS):
(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

**SCOPE: ARTIFICIAL INTELLIGENCE + HEALTH INFORMATICS +
DATA SCIENCE**

Co-Chairs: TBA

July 24, 2024 (Wednesday); 08:20am - 10:00am

(LOCATION: Ballroom Galleria D)

- 08:20 - 08:40am: Explainable Machine Learning-Based Alzheimer's Disease Prediction
Paulina Gonzalez O., Gideon K. Gogovi
College of Health, Lehigh University, Bethlehem, PA, USA
- 08:40 - 09:00am: An Application of Convolutional Neural Networks to Chaotic Systems
Jamal Rorie, Dean Lee, Andrew Sabater, Josh Duclos
Naval Information Warfare Center Pacific (NIWC), San Diego, California, USA
- 09:00 - 09:20am: Integrating Retrieval-Augmented Generation with Large Language Models for Supply Chain and Finance Optimization
Beilei Zhu*, Chandrasekar Vuppalapati
Global Supply Chain, Intel Corp., Hillsboro, Oregon, USA;
Computer Engineering, San Jose State University, San Jose, California, USA
- 09:20 - 09:40am: An ISR Asset Planning Application
Wilmuth Muller*, Frank Reinert, Uwe Pfirmann
Interoperability and Assistance Systems, Fraunhofer IOSB, Karlsruhe, Germany
- 09:40 - 10:00am: Fraud Detection Using Machine Learning Models and Encryption Techniques
Jigyasa Agrawal, Hien Nguyen*
Computer Science & Math Program, Penn State Harrisburg, Middletown, PA, USA
- 10:00 - 10:20am: BREAK (Refreshments)**
July 24, 2024 (Wednesday)
(LOCATION: Galleria B & C; Registration Counter/Desk)

SESSION 19-WED (ACC + ICAI TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: APPLIED COGNITIVE COMPUTING + ARTIFICIAL INTELLIGENCE

Co-Chairs: TBA

July 24, 2024 (Wednesday); 10:20am - 12:20pm

(LOCATION: Ballroom Galleria D)

- 10:20 - 10:40am: In-vehicle Sensing Platform for the Inference of Older Drivers' Mild Cognitive Condition
Sonia Moshfeghi, Jinwoo Jang, Muhammad Tanveer Jan, Seyedeh Gol Ara Ghoreishi, Borko Furht, Kwangsoo Yang, Ruth Tappen, David Newman, Joshua Conniff, Monica Rosselli
College of Engineering and Computer Science, Florida Atlantic University, Boca Raton, Florida, USA;
Christine E. Lynn College of Nursing, Florida Atlantic University, Boca Raton, Florida, USA;
Charles E. Schmidt College of Science, Florida Atlantic University, Boca Raton, Florida, USA
- 10:40 - 11:00am: Compararitive Analysis of AI-Powered Image Recognition for Dermatological Diagnosis
Ali Al-Sinayid, Alexander Sanchez, Timothy Sanford II, Kadiyala Sasidhar, Venkatesh Mannuru, Rohith Reddy Battula
Department of Mathematics and Computer Science, West Virginia State University, Institute, West Virginia, USA
- 11:00 - 11:20am: Multimodal Insights: ImageBind Embedding Space Analysis in Auto Parts Online Marketplace Data Exploration
Andrew Hamara, Pablo Rivas
School of Engineering and Computer Science, Department of Computer Science, Baylor University, Waco, Texas, USA
- 11:20 - 11:40am: Explainable AI for SQL Grading: A Practical Approach with Multi-Task CNNs
Pablo Rivas, Donald Schwartz*
School of Engineering and Computer Science, Department of Computer Science, Baylor University, Waco, Texas, USA;
School of Computer Science and Mathematics, Department of Computing Technology, Marist College, Poughkeepsie, New York, USA
- 11:40a - 12:00p: Leveraging Openflamingo for Multimodal Embedding Analysis of C2C Car Parts Data
Maisha Binte Rashid, Pablo Rivas*
School of Engineering and Computer Science, Department of Computer Science, Baylor University, Waco, Texas, USA
- 12:00 - 12:20pm: Subject Matter Expert versus ChatGPT
Charles E. Knadler, Jr.
Independent Researcher: Mathematical Biology and Numerical Computing, USA
- 12:20 - 01:20pm: **LUNCH (On Your Own)**

July 24

SESSION 20-WED (SERP + ICWN + FECS TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

**SCOPE: SOFTWARE ENGINEERING + WIRELESS NETWORKS +
FRONTIERS IN EDUCATION: CS & CE**

Co-Chairs: TBA

July 24, 2024 (Wednesday); 01:20pm - 03:00pm

(LOCATION: Ballroom Galleria D)

- 01:20 - 01:40pm: Machine Learning Operations: A Mapping Study
Abhijit Chakraborty, Suddhasvatta Das, Kevin Gary
School of Computing and Augmented Intelligence,
Arizona State University, Arizona, USA
- 01:40 - 02:00pm: ES4AL: A Website for Effectiveness Study for Algorithm
Learning in Computer Science
Willow Justin*, Gilbert Young
Department of Computer Science, California State Polytechnic
University, Pomona, California, USA
- 02:00 - 02:20pm: Minimum Dominating Set and Minimum Connected Dominating Set
Construction in Wireless Sensor Networks under the
Sleeping Model
Tan Lam*, Dung Huynh
University of Texas at Dallas, Texas, USA
- 02:20 - 02:40pm: ECAF: Educational Cybersecurity Assessment Framework for
Small Businesses
Ethan Zhang
Youth Cyber Defender, Portland, Oregon, USA
- 02:40 - 03:00pm: Digital Badging as a Motivator in an Undergraduate Course
Gina Cooper, Victoria Kim, Paula C. Herring, and
Parvaneh Kazemi-Tabrizi
Engineering Information Systems, DeVry University, Columbus,
Ohio, USA;
Math and Learning Technology, DeVry University, San Jose,
California, USA; Business, DeVry University, San Diego,
California, USA; Business, DeVry University, Phoenix,
Arizona, USA

03:00 - 03:40pm: **BREAK (Refreshments) & POSTERS**

July 24, 2024 (Wednesday)

(LOCATION: Galleria B & C; Registration Counter/Desk)

- 0. Off-line CNN based Finger Number Gesture Recognition System using Raspberry pi
Gerelbat Batgerel, Chunki Kwon*
Department of Medical IT Engineering,
Soonchunhyang university, Asan-si, South Korea
- 0. High Level Design of Photorealistic VTON System based on Generative A.I. Technologies
Sang-Heon Lee*, Myoung-Kyu Sohn, Hyunduk Kim, Junkwang Kim
Division of Automotive Technology, Daegu Gyeongbuk
Institute of Science & Technology (DGIST), Daegu,
Republic of Korea
- 0. Train AI Architects Skills - Integrating the Talent of People and Machines to go Further in Applying JIDOKA and YOKOTEN in Operations
J. Costas, R. Pastor, C. Garcia, R. Pino
Escuela Politecnica de Ingenieria de Gijon, Campus de
Viesques s/n, Gijon (Asturias), Spain
- 0. LLM-Powered OLAP: Tackling High level Business Questions
Ainesh Panda, Fatemeh Sarayloo, Pragya Arora, Nithin Gowda,
Chun Hung Lin, Ayushi Gaur
University of Illinois at Chicago, USA
- 0. Soft Actor Critic based End-to-End QoS Path Selection in Multi-Domain SDN Environments
Gyumin Lee, Junghyun Lim, Byeong-hee Roh*
AI Development Team, Webzen Inc., Seongnam, South Korea;
Department of AI Convergence Network, Ajou University,
Suwon, South Korea
- 0. Analyzing the Influence of File Formats on I/O Patterns in Deep Learning
Betzabeth Leon, Edixon Parraga, Sandra Mendez,
Dolores Rexachs, Remo Suppi, Emilio Luque
Computer Architecture and Operating Systems Department,
Universitat Autònoma de Barcelona (UAB), Bellaterra,
Barcelona, Spain;
Computer Sciences Department, Barcelona Supercomputing
Center (BSC), Barcelona, Spain
- 0. Automating Automation: Using LLMs to Generate BPMN Workflows for Robotic Process Automation
Carlos Toxtli, Wangfan Li
Clemson University, South Carolina, USA

July 24

SESSION 21-WED (SAM TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: SECURITY AND MANAGEMENT

Co-Chairs: TBA

July 24, 2024 (Wednesday); 03:40pm - 05:00pm

(LOCATION: Ballroom Galleria D)

- 03:40 - 04:00pm: Green Cybersecurity: An Evaluation of Antivirus Energy Consumption and Implications for Sustainable Software Engineering
Dwight Horne
Department of Computer Science, Baylor University, Waco, Texas, USA
- 04:00 - 04:20pm: Regarding the Exponential Growth of Security Vulnerabilities
Joline Wochnik, Olivia Sina Graupner, Michael Spranger, and Christian Hummert
Agentur fur Innovation in der Cybersicherheit GmbH, Halle (Saale), Germany;
Hochschule Mittweida, University of Applied Sciences, Mittweida, Germany
- 04:20 - 04:40pm: Russian Cyber Disinformation Campaigns and Possible Countermeasures
LT Michael R. Williams, Neil C. Rowe*
U.S. Naval Postgraduate School Monterey, California, USA
- 04:40 - 05:00pm: Determining the Secret Key in Hotel Card Lock Key Communication
Cheryl Hinds*, Jonathan Graham, Thalia Guadalupe
Department of Computer Science,
Norfolk State University, Norfolk, Virginia, USA

July 24

SESSION 22-WED (EEE + ICAI TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

**SCOPE: E-LEARNING, E-BUSINESS, EIS & E-GOVERNMENT +
ARTIFICIAL INTELLIGENCE**

Co-Chairs: TBA

July 24, 2024 (Wednesday); 05:00pm - 06:00pm

(LOCATION: Ballroom Galleria D)

- 05:00 - 05:20pm: Improving Student Success in Math Courses Using WebWork
Dhruba R. Adhikari, Larry Wang*
Department of Mathematics, Kennesaw State University,
Marietta, Georgia, USA
- 05:20 - 05:40pm: Use of Emerging Technologies in Africa
Matthew N. O. Sadiku*, Janet O. Sadiku, Uwakwe C. Chukwu
Department of Electrical & Computer Engineering,
Prairie View A & M University, Prairie View, Texas, USA;
Juliana King University, Houston, Texas, USA;
Department of Engineering Technology, South Carolina State
University, Orangeburg, South Carolina, USA
- 05:40 - 06:00pm: Artificial Intelligence in Africa
Matthew N. O. Sadiku*, Janet O. Sadiku, Uwakwe C. Chukwu
Department of Electrical & Computer Engineering,
Prairie View A & M University, Prairie View, Texas, USA;
Juliana King University, Houston, Texas, USA;
Department of Engineering Technology, South Carolina State
University, Orangeburg, South Carolina, USA
- 06:00 - 06:20pm: FREE SLOT

<----- LOCATION: Ballroom Galleria E ----->

SESSION 23-WED (FECS TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: FRONTIERS IN EDUCATION: CS & CE

Co-Chairs: TBA

July 24, 2024 (Wednesday); 08:20am - 10:20am

(LOCATION: Ballroom Galleria E)

- 08:20 - 08:40am: Assessing ChatGPT for Algorithm Time Complexity Education
Dorde Pesic, Milena Vujosevic Janicic, Marko Mistic,
and Jelica Protic
School of Electrical Engineering, University of Belgrade,
Serbia;
Faculty of Mathematics, University of Belgrade, Serbia
- 08:40 - 09:00am: Developing a Machine Learning Model to Identify At-Risk
Students
Azucena L. Jimenez Martinez, Kanika Sood, Rakeshkumar Mahto
Department of Computer Science, California State University,
Fullerton, California, USA;
Department of Electrical and Computer Engineering,
California State University, Fullerton, California, USA
- 09:00 - 09:20am: OBDev: Wireless on Board Development Environment for
Raspberry Pi Pico W
Byron A. Jeff*, Muhammad Rahman
Department of Computer Science and Information Technology,
Clayton State University, Morrow, Georgia, USA
- 09:20 - 09:40am: Using Logical Fallacies to Educate Computer Science Students
Peter M. Maurer
Department of Computer Science, Baylor University, Texas, USA
- 09:40 - 10:00am: An Edge AI Course Template
Ning Chen
Department of Computer Science, California State University,
Fullerton, California, USA
- 10:00 - 10:20am: INDRA: A Drone Penetration Testing Platform for Cybersecurity
Education
Thomas Devine, Dylan Cunningham, Thomas Hasselman,
Anthony Hudson, Alexander Roland, Justin Scott, Grant Thompson,
Logan Yokum, Peter Zekonis
West Virginia University, Morgantown, West Virginia, USA
- 10:20 - 10:40am: **BREAK (Refreshments)**
July 24, 2024 (Wednesday)
(LOCATION: Galleria B & C; Registration Counter/Desk)

SESSION 24-WED (ICWN + ESCS TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

**SCOPE: WIRELESS NETWORKS + EMBEDDED SYSTEMS,
CYBER-PHYSICAL SYSTEMS, & APPLICATIONS**

Co-Chairs: TBA

July 24, 2024 (Wednesday); 10:40am - 12:20pm

(LOCATION: Ballroom Galleria E)

- 10:40 - 11:00am: SVM Enhanced Detection of Volume-Based Attacks in IoT Networks
Ali Al-Sinayyid, Kadiyala Sasidhar, Venkatesh Mannuru,
Rohith Reddy Battula, Timothy Sanford Ii, Alexander Sanchez
Department of Mathematics and Computer Science,
West Virginia State University, Institute, West Virginia, USA
- 11:00 - 11:20am: Wireless Multihop Transmissions with Concurrent Forwarding
without Collisions by Capture Effect
Shintaro Okazaki, Hiroaki Higaki*
Department of Robotics and Mechatronics,
Tokyo Denki University, Tokyo, Japan
- 11:20 - 11:40am: Utilizing Logistic Regression to Detect Tautology Based SQL
Injection Attacks
Ali Al-Sinayyid, Venkatesh Mannuru, Kadiyala Sasidhar,
Rohith Reddy Battula, Timothy Sanford Ii, Alexander Sanchez
Department of Mathematics and Computer Science,
West Virginia State University, Institute, West Virginia, USA
- 11:40a - 12:00p: Container Performance in Space Systems
Shar M. Alamgir*, Dhruv L. Bohra, Elisabeth A. Nguyen
Embedded and Specialized Computing Department, The Aerospace
Corporation, El Segundo, California, USA;
Embedded and Specialized Computing Department, The Aerospace
Corporation, Chantilly, Virginia, USA;
Software Architecture & Engineering Department, The Aerospace
Corporation, Chantilly, Virginia, USA
- 12:00 - 12:20pm: Analytical Study on Advanced Persistent Threat Detecting,
Defending and Mitigating
Ali Al-Sinayyid*, Rohith Reddy Battula, Kadiyala Sasidhar,
Venkatesh Mannuru, Timothy Sanford Ii, Alexander Sanchez
Department of Mathematics and Computer Science,
West Virginia State University, Institute, West Virginia, USA
- 12:20 - 01:20pm: **LUNCH (On Your Own)**

SESSION 25-WED (ICDATA TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: DATA SCIENCE & APPLICATIONS

Co-Chairs: TBA

July 24, 2024 (Wednesday); 01:20pm - 03:00pm

(LOCATION: Ballroom Galleria E)

- 01:20 - 01:40pm: User Behavior based Implicit Personality Detection in Recommendation Systems
Uzma Zubair Shaikh*, Robert Chun
Department of Computer Science,
San Jose State University, San Jose, California, USA
- 01:40 - 02:00pm: Transforming Hurricane Intensity Prediction: Leveraging Transformers for Enhanced Forecasting Accuracy
Rose Atuah*, Michael McGuire, Khalil Ibrahim Almakrami,
and Qianlong Wang
Towson University, USA
- 02:00 - 02:20pm: Subgraph2vec: A Random Walk-Based Algorithm for Embedding Knowledge Graphs
Elika Bozorgi*, Saber Soleimani, Sakher Khalil Alqaidi,
Hamid Reza Arabnia, Krzysztof Kochut
School of Computing, University of Georgia, Georgia, USA
- 02:20 - 02:40pm: Predictive Analysis of Defense Language Proficiency Test Outcomes: A Comparative Study Using Neural Networks and Logistic Regression
Jared Smith, Eric Mbonimpa*, Torrey Wagner, Brent Langhals
Graduate School of Engineering and Management, Air Force
Institute of Technology, Wright-Patterson AFB, Ohio, USA
- 02:40 - 03:00pm: Trust as a Classification Tool: Analyzing Collaboration in Senate Floor Speeches on Gun Legislation Post-Uvalde and Sandy Hook
William Ledbetter
Department of Computer and Information Technology,
Purdue University, West Lafayette, Indiana, USA

03:00 - 03:40pm: **BREAK (Refreshments) & POSTERS**

July 24, 2024 (Wednesday)

(LOCATION: Galleria B & C; Registration Counter/Desk)

- 0. Off-line CNN based Finger Number Gesture Recognition System using Raspberry pi
Gerelbat Batgerel, Chunki Kwon*
Department of Medical IT Engineering,
Soonchunhyang university, Asan-si, South Korea
- 0. High Level Design of Photorealistic VTON System based on Generative A.I. Technologies
Sang-Heon Lee*, Myoung-Kyu Sohn, Hyunduk Kim, Junkwang Kim
Division of Automotive Technology, Daegu Gyeongbuk
Institute of Science & Technology (DGIST), Daegu,
Republic of Korea
- 0. Train AI Architects Skills - Integrating the Talent of People and Machines to go Further in Applying JIDOKA and YOKOTEN in Operations
J. Costas, R. Pastor, C. Garcia, R. Pino
Escuela Politecnica de Ingenieria de Gijon, Campus de
Viesques s/n, Gijon (Asturias), Spain
- 0. LLM-Powered OLAP: Tackling High level Business Questions
Ainesh Panda, Fatemeh Sarayloo, Pragya Arora, Nithin Gowda,
Chun Hung Lin, Ayushi Gaur
University of Illinois at Chicago, USA
- 0. Soft Actor Critic based End-to-End QoS Path Selection in Multi-Domain SDN Environments
Gyumin Lee, Junghyun Lim, Byeong-hee Roh*
AI Development Team, Webzen Inc., Seongnam, South Korea;
Department of AI Convergence Network, Ajou University,
Suwon, South Korea
- 0. Analyzing the Influence of File Formats on I/O Patterns in Deep Learning
Betzabeth Leon, Edixon Parraga, Sandra Mendez,
Dolores Rexachs, Remo Suppi, Emilio Luque
Computer Architecture and Operating Systems Department,
Universitat Autònoma de Barcelona (UAB), Bellaterra,
Barcelona, Spain;
Computer Sciences Department, Barcelona Supercomputing
Center (BSC), Barcelona, Spain
- 0. Automating Automation: Using LLMs to Generate BPMN Workflows for Robotic Process Automation
Carlos Toxtli, Wangfan Li
Clemson University, South Carolina, USA

July 24

SESSION 26-WED (IPCV TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

**SCOPE: IMAGE PROCESSING, COMPUTER VISION, &
PATTERN RECOGNITION**

Co-Chairs: TBA

July 24, 2024 (Wednesday); 03:40pm - 04:00pm

(LOCATION: Ballroom Galleria E)

- 03:40 - 04:00pm: Dishari: A Novel Gesture-Based Educational Application for Specially Challenged People
Tathagata Bhattacharya, Irshad Ali Mohammad
Auburn University at Montgomery, Alabama, USA
- 04:00 - 04:20pm: Image-Based Leopard Seal Recognition: Approaches and Challenges in Current Automated Systems
Jorge Yero Salazar, Pablo Rivas, Renato Borrás-Chavez, and Sarah Kienle
School of Engineering & Computer Science, Department of Computer Science, Baylor University, Waco, Texas, USA;
College of Arts & Sciences, Department of Biology, Baylor University, Waco, Texas, USA

SESSION 27-WED (PDPTA TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: PARALLEL & DISTRIBUTED PROCESSING TECHNIQUES & APPLICATIONS + HPC

Co-Chairs: TBA

July 24, 2024 (Wednesday); 04:20pm - 05:40pm

(LOCATION: Ballroom Galleria E)

- 04:20 - 04:40pm: A Methodical Approach to Parallel I/O Analysis in Distributed Deep Learning Applications
Edixon Parraga*, Betzabeth Leon, Sandra Mendez, Dolores Rexachs, Remo Suppi, Emilio Luque
Computer Architecture and Operating Systems Department, Universitat Autònoma de Barcelona (UAB), Spain;
Computer Sciences Department, Barcelona Supercomputing Center (BSC), Barcelona, Spain
- 04:40 - 05:00pm: Explore Effective Attack Graph Generation on HPC Clusters
Ming Li
Tandy School of Computer Science, The University of Tulsa, Tulsa, Oklahoma, USA
- 05:00 - 05:20pm: An Efficient Data Provenance Collection Framework for HPC I/O Workloads
Md Kamal Hossain Chowdhury*, Purushotham V. Bangalore
Department of Computer Science, College of Engineering, University of Alabama, Tuscaloosa, Alabama, USA
- 05:20 - 05:40pm: A Comparative Study of Two Matrix Multiplication Algorithms Under Current Hardware Architectures
Samuel Olatunde*, Eduardo Colmenares
Department of Computer Science, Midwestern State University, Wichita Falls, Texas, USA
- 05:40 - 06:00pm: FREE SLOT
- 06:00 - 06:20pm: FREE SLOT

ONLINE / ZOOM SESSIONS

ALL DATES AND TIMES ARE GIVEN IN USA PACIFIC TIME ZONE (PT).

08:00 - 08:20am: FREE SLOT

08:20 - 08:40am: FREE SLOT

08:40 - 09:00am: FREE SLOT

09:00 - 09:20am: FREE SLOT

09:20 - 09:40am: FREE SLOT

09:40 - 10:00am: FREE SLOT

10:00 - 10:20am: FREE SLOT

10:20 - 10:40am: FREE SLOT

10:40 - 11:00am: FREE SLOT

11:00 - 11:20am: FREE SLOT

11:20 - 11:40am: FREE SLOT

11:40a - 12:00p: FREE SLOT

SESSION 11-ZOOM: ICEQT + ICAI TRACKS
SCOPE: EMERGENT QUANTUM TECHNOLOGIES +
ARTIFICIAL INTELLIGENCE
Chairs: TBA
July 24, 2024 (Wednesday); 12:00pm - 01:20pm
(ON-LINE / ZOOM)

12:00 - 12:20pm: Evaluating Cost-Effective Reconfigurable Hardware for Quantum Simulation
 Ishraq Islam, Vinayak Jha, Alvir Nobel, David Levy,
 Manu Chaudhary, Dylan Kneidel, Esam El-Araby
 University of Kansas, USA

12:20 - 12:40pm: An Efficient Quantum Solver for Multidimensional Partial Differential Equations
 Manu Chaudhary, Ishraq Islam, David Levy, Alvir Nobel,
 Dylan Kneidel, Vinayak Jha, Esam El-Araby
 University of Kansas, USA

12:40 - 01:00pm: Optimizing Depth of Quantum Circuits for Generating GHZ States
 Nishitha Reddy venkannagari, Varun teja Puram, Johnson Thomas
 Oklahoma State University, Oklahoma, USA;
 Northeastern State University, USA

01:00 - 01:20pm: Exploring Data Augmentation and Stochastic Weight Averaging as an Alternative to Adversarial Training of Deep Neural Networks
 Anabetsy Termini*, Sumitra Mukherjee
 College of Computing and Engineering,
 Nova Southeastern University, Florida, USA

July 24

- SESSION 12-ZOOM: FECS + SERP + SAM TRACKS**
SCOPE: EDUCATION + SOFTWARE ENGINEERING + SECURITY MANAGEMENT
Chairs: TBA
July 24, 2024 (Wednesday); 01:20pm - 03:20pm
(ON-LINE / ZOOM)
- 01:20 - 01:40pm: Adapting to the AI Disruption: Reshaping the IT Landscape and Educational Paradigms
Murat Ozer*, Hazem Said
School of Information Technology, University of Cincinnati, Cincinnati, Ohio, USA
- 01:40 - 02:00pm: A Framework for Requirements Modeling of Safety Critical Systems: A Continuous Glucose Monitoring System Case Study
Aiman Gannous, Ramadan Abdunabi, Abdulfatah Elbarsha
Department of Health Informatics, University of Benghazi, Benghazi, Libya;
Computer Information Systems Department, Colorado State University, Fort Collins, Colorado, USA
- 02:00 - 02:20pm: Detection of Network Anomalies Using Unsupervised and Reinforcement Learning Models
Willie L. Waters*, Mohamed Chouikha, Annamalai Annamalai
Department of Electrical Engineering, A&M University College of Engineering, Prairie View A&M University, Texas, USA
- 02:20 - 02:40pm: Detecting Sybil Attacks in Decentralized Marketplaces
Meshari Aljohani, Ravi Mukkamala*, Stephan Olariu, and Mohan Sunkara
Department of Computer Science, Old Dominion University, Norfolk, Virginia, USA
- 02:40 - 03:00pm: Analysis of Zero Day Attack Detection Using MLP and XAI
Ashim Dahal, Prabin Bajgai, Nick Rahimi
School of Computing Sciences & Computer Engineering, University of Southern Mississippi, Hattiesburg, Mississippi, USA
- 03:00 - 03:20pm: Unmasking ZetaXE: A Tool to Successfully Implement Social Engineering Attacks
Daryan J. Karimzadeh, Tamirat T. Abegaz, Bryson R. Payne
Department of Computer Science and Information Systems, University of North Georgia, Dahlonega, Georgia, USA
- 03:20 - 03:40pm: FREE SLOT
- 03:40 - 04:00pm: FREE SLOT

<----- LOCATION: Ballroom Galleria D ----->

SESSION 28-THU (ICDATA TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

**SCOPE: REAL-WORLD DATA MINING APPLICATIONS, CHALLENGES,
AND PERSPECTIVES**

Co-Chairs: Dr. Mahmoud Abou-Nasr

Adjunct Faculty: Computer & Information Systems

Department, University of Michigan Dearborn, USA

July 25, 2024 (Thursday); 08:40am - 10:20am

(LOCATION: Ballroom Galleria D)

08:20 - 08:40am: FREE SLOT

08:40 - 09:00am: Harnessing LLMs to Build an Autonomous Marketing Agent
Abithaa Shree Venkatesh, Ann Mathew, Monika Madugula,
Nagraj Deshmukh, Pratik Mahesh Merchant, Matthew Lanham
Purdue University, USA

09:00 - 09:20am: SSSDAD: Structured State Space Diffusion Anomaly Detection
in Industrial Time Series Data
Manuel Hirth*, Daniel Meier, Nasser Jazdi,
Johann-Friedrich Luy, Enkelejda Kasneci
Technical University of Munich, Germany;
Daimler Truck, Germany

09:20 - 09:40am: Government Contracts in Pandemic Era: A Comprehensive Impact
Analysis Using Predictive Analytics
Fatemeh Sarayloo, Nabila Fakhruddin, Sunaina Tarimela,
Vojtech Mensik, Aarsh Vyas, Jahnavi Gulabani
University of Illinois at Chicago, USA

09:40 - 10:00am: AuthAttlyzer-V2: Unveiling Code Authorship Attribution using
Enhanced Ensemble Learning Models and Generating Benchmark
Dataset
Arash Habibi Lashkari*, Sepideh Hajhosseinkhani
York University, Canada

10:00 - 10:20am: NLP-Guided Synthesis: Transitioning from Sequential Programs
to Distributed Programs
Arun Sanjel, Greg Speegle, Bikram Khanal, Pablo Rivas
Baylor University, Waco, Texas, USA

10:20 - 10:40am: **BREAK (Refreshments)**
July 25, 2024 (Thursday)
(LOCATION: Galleria B & C; Registration Counter/Desk)

July 25

SESSION 29-THU (ICAI TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: ARTIFICIAL INTELLIGENCE & APPLICATIONS

Co-Chairs: TBA

July 25, 2024 (Thursday); 10:40am - 12:20pm

(LOCATION: Ballroom Galleria D)

- 10:40 - 11:00am: Harnessing Pre-Trained Language Models for Efficient Move Recognition in Biomedical Abstracts
Gaurav Patil*, Robert E. Mercer
Department of Computer Science, University of Western Ontario, London, ON, Canada
- 11:00 - 11:20am: Automatic Modulation Recognition: A Hybrid Approach using Deep Learning and K-Means Clustering
Connor Cavarretta, Mihair Hajar-Soria, Nahiyan Hussain, and Ruting Jia
California State University Northridge, California, USA
- 11:20 - 11:40am: Pruning and Optimizing Large Language Models in an Era of GPU Scarcity
Ashhadul Islam*, Samir Brahim Belhaouari, Amine Bermak
College Of Science & Engineering,
Hamad Bin Khalifa University, Doha, Qatar
- 11:40a - 12:00p: Detecting Hallucinations in Large Language Model Generation: A Token Probability Approach
Ernesto Quevedo, Jorge Yero Salazar, Rachel Koerner, Pablo Rivas, Tomas Cerny
Department of Computer Science, School of Engineering & Computer Science, Baylor University, Waco, Texas, USA;
Department of Systems & Industrial Engineering, College of Engineering, The University of Arizona, Arizona, USA
- 12:00 - 12:20pm: Taming Large Language Models for Healthcare - A Multi-Layered Guardrail System
Bharath Sudharsan*, Ryan Kosiba
AmalgamRx, Wilmington, Delaware, USA
- 12:20 - 01:20pm: **LUNCH (On Your Own)**

SESSION 30-THU (ICEQT + ICAI TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: EMERGENT QUANTUM TECHNOLOGIES + ARTIFICIAL INTELLIGENCE

Co-Chairs: TBA

July 25, 2024 (Thursday); 01:20pm - 03:00pm

(LOCATION: Ballroom Galleria D)

- 01:20 - 01:40pm: Leveraging JSBSim and Gymnasium: A Reinforcement Learning Approach for Air Combat Simulation
Abderahim Salhi*, Joseph E. Jabour, Thomas L. Arnold, James E. Ross, Haley R. Dozier
United States Army Corps of Engineers, Vicksburg, Mississippi, USA
- 01:40 - 02:00pm: A Comparative Analysis of Hybrid-Quantum Classical Neural Networks
Kamila Zaman, Tasnim Ahmed, Muhammad Abdullah Hanif, Alberto Marchisio*, Muhammad Shafique
New York University Abu Dhabi, United Arab Emirates (UAE)
- 02:00 - 02:20pm: Eclipse Qrisp QAOA: Description and Preliminary Comparison with Qiskit Counterparts
Eneko Osaba, Matic Petric, Izaskun Oregi, Raphael Seidel, Alejandra Ruiz, Michail-Alexandros Kourtis
Tecnalia, Spain;
Fraunhofer Institute for Open Communication Systems (FOKUS), Germany;
National Centre for Scientific Research Demokritos, Greece
- 02:20 - 02:40pm: Studying the Impact of Quantum-Specific Hyperparameters on Hybrid Quantum-Classical Neural Networks
Kamila Zaman, Tasnim Ahmed, Muhammad Kashif, Muhammad Abdullah, Alberto Marchisio*, Muhammad Shafique
New York University Abu Dhabi, United Arab Emirates (UAE)
- 02:40 - 03:00pm: NRQNN: The Role of Observable Selection in Noise-Resilient Quantum Neural Networks
Muhammad Kashif*, Muhammad Shafique
New York University Abu Dhabi, United Arab Emirates (UAE)
- 03:00 - 03:20pm: **BREAK (Refreshments)**
July 25, 2024 (Thursday)
(LOCATION: Galleria B & C; Registration Counter/Desk)

July 25

----> ROOM CHANGE - to Ballroom Galleria E

03:20 - 03:40pm: CONGRESS CLOSING REMARKS
(LOCATION: Ballroom Galleria E)

<----- LOCATION: Ballroom Galleria E ----->

SESSION 31-THU (HIMS + IKE TRACKS):
(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

**SCOPE: HEALTH INFORMATICS & MEDICAL SYSTEMS +
INFORMATION & KNOWLEDGE ENGINEERING**

Co-Chairs: TBA

July 25, 2024 (Thursday); 08:40am - 10:00am
(LOCATION: Ballroom Galleria E)

08:20 - 08:40am: FREE SLOT

08:40 - 09:00am: Evaluating Vaccine Effectiveness During the COVID-19 Pandemic:
Insights from Advanced Statistical and Machine Learning Methods
Dominic Etli
Occupational Medicine, Mission Support and Test Services,
Las Vegas, Nevada, USA

09:00 - 09:20am: Advancing Health Literacy through Generative AI: The Utilization
of Open-source LLMs for Text Simplification and Readability
Guy Hembroff, Sifat Naseem
Michigan Technological University, Michigan, USA

09:20 - 09:40am: Using Linkage Context for Automated Correction in Unsupervised
Entity Resolution
Fumiko Kobayashi*, John R. Talburt
Donaghey College of Science, Technology, Engineering, and
Mathematics, The University of Arkansas at Little Rock,
Arkansas, USA

09:40 - 10:00am: The Application of Blockchain Technology in the Transmission
of Semiconductor Process Recipes
Iuon-Chang Lin, Mao-Hsiu Hsu*, Hung-Kai Wan
National Chung Hsing University, Taichung Taiwan;
Department of Electro-Optical Engineering, National Formosa
University, Yunlin, Taiwan

10:00 - 10:20am: **BREAK (Refreshments)**
July 25, 2024 (Thursday)
(LOCATION: Galleria B & C; Registration Counter/Desk)

July 25

SESSION 32-THU (CSC TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: SCIENTIFIC COMPUTING

Co-Chairs: TBA

July 25, 2024 (Thursday); 10:20am - 11:00am

(LOCATION: Ballroom Galleria E)

- 10:20 - 10:40am: Multi-class Classification of Satellite Orbits for Database Quality Control
Richard Peterson, Torrey Wagner, Paul Auclair, Brent Langhals
Air Force Institute of Technology, Wright-Patterson AFB,
Ohio, USA;
LinQuest Corporation, Beavercreek, Ohio, USA
- 10:40 - 11:00am: Real-time Motion Planning for Autonomous Vehicles in Dynamic Environments
Mohammad Dehghani Tezerjani*, Sudip Dhakal, Deyuan Qu,
Dominic Carrillo, Amir Mirzaeinia, Qing Yang
Department of Computer Science and Engineering,
University of North Texas, Texas, USA

SESSION 33-THU (SAM TRACK):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: SECURITY AND MANAGEMENT

Co-Chairs: TBA

July 25, 2024 (Thursday); 11:00am - 12:20pm

(LOCATION: Ballroom Galleria E)

- 11:00 - 11:20am: An Optimized Key Schedule Algorithm of PRESENT-128 using Elliptic Curve Cryptosystem
Saleh Al-Sharaeh*, Waleed Hisham Al-Fakiat
Department of Computer Science, King Abdullah II School of Information Tech., The University of Jordan, Amman, Jordan
- 11:20 - 11:40am: Adaptive Leadership in Public-Private Partnerships for Security Enhancement
Satpreet Singh
National University, Manteca, California, USA
- 11:40a - 12:00p: An Analysis of Cyber Threats and the Protective Role of Cyber Insurance in the US Market
Zia Muhammad, Jeremy Straub
Department of Computer Science, North Dakota State University, Fargo, North Dakota, USA;
Institute for Cyber Security Education and Research, North Dakota State University, Fargo, North Dakota, USA
- 12:00 - 12:20pm: The Role of Cyber Incident Response Plans in Securing Higher Education Institutions
Tanya Graham*, D'Andra Bennett, Jameilia Jones, Shantae Coote, Jada Lawrence
University of Technology, Jamaica
- 12:20 - 01:20pm: **LUNCH (On Your Own)**

July 25

SESSION 34-THU (SAM TRACK): Continued ...

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: SECURITY AND MANAGEMENT

Co-Chairs: TBA

July 25, 2024 (Thursday); 01:20pm - 03:00pm

(LOCATION: Ballroom Galleria E)

- 01:20 - 01:40pm: Detecting Malware Traffic with Graph Neural Networks
Matthew Straughn, Armon Barton*, Bruce Allen
Computer Science Department,
Naval Postgraduate School Monterey, California, USA
- 01:40 - 02:00pm: Reverse Engineering the CAN Bus: Vulnerability Analysis in
the Tesla Model
Matthew A. Telfor, Bryson R. Payne*, Tamirat T. Abegaz
Department of Computer Science and Information Systems,
University of North Georgia, Dahlonega, Georgia, USA
- 02:00 - 02:20pm: Managing Human Factors Vulnerabilities in the Risk
Assessment Process
Olumide Malomo*, Shanzhen Gao, Adeyemi A. Adekoya, Ephrem Eyob,
Aurelia M. Donald, Cynthia S. Ellison, Julian D. Allaga,
Weizheng Gao, Jianning Su
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, The School of Science, Aviation, Health, &
Technology, Elizabeth City State University, Elizabeth City,
North Carolina, USA;
Department of Mathematics, Perimeter College, Georgia State
University, Atlanta, Georgia, USA
- 02:20 - 02:40pm: Federated Deep Learning-Based Framework for Intrusion
Detection in Modbus Sensor Networks
Abir EL Azzaoui, Jimin Ha, Jungho Kang, Ji Su Park, and
Jong Hyuk Park
Department of Computer Science and Engineering,
Seoul National University of Science and Technology,
Seoul, South Korea;
Department of Software Engineering, Baewha Women's
University, Seoul, South Korea;
Department of Computer Science and Engineering,
Jeonju University, Jeonju-si, South Korea
- 02:40 - 03:00pm: FREE SLOT
- 03:00 - 03:20pm: **BREAK (Refreshments)**
July 25, 2024 (Thursday)
(LOCATION: Galleria B & C; Registration Counter/Desk)
- 03:20 - 03:40pm: **CONGRESS CLOSING REMARKS**
(LOCATION: Ballroom Galleria E)

LIST OF OTHER PAPERS & POSTERS (Presentation Options 3 or NR):

Authors and speakers were given the following presentation options:

OPTION 1: Presenting the paper on site at the congress.

OPTION 2: Presenting the paper remotely: using Zoom (interactive).

OPTION 3: Presenting the paper remotely (non-interactive).

The link to these pre-recorded presentations will later be included in the "Book of Abstracts" and will be made available on the CSCE 2024 web site at

<https://www.american-cse.org/csce2024/>

<https://www.american-cse.org/csce2024/program>

The list that appears below includes all those papers and posters whose authors selected OPTION 3 or NR (did Not Report).

**The 8th International Conference on Applied Cognitive Computing
(ACC'24: July 22-25, 2024; Las Vegas, USA)
<https://american-cse.org/csce2024/conferences-ACC>**

0. A Secure Self-Adaptive System in Applications of Cognitive Computing
Yong-Kyu Jung
Georgia Institute of Technology, Georgia, USA;
Gannon University, Erie, Pennsylvania, USA

**The 25th International Conference on Bioinformatics &
Computational Biology**

(BIOCOMP'24: July 22-25, 2024; Las Vegas, USA)

<https://american-cse.org/csce2024/conferences-BIOCOMP>

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**The 10th International Conference on Biomedical
Engineering & Sciences**

(BIOENG'24: July 22-25, 2024; Las Vegas, USA)

<https://american-cse.org/csce2024/conferences-BIOENG>

0. Enhancing Diabetes Prediction with Advanced Machine Learning Techniques
Yuan Tian, Chuan Wang, Wen Shi, Ying Zhou, Yi Zhou
Vanderbilt University, Nashville, Tennessee, USA;
Department of Chemical Engineering & Department of Biosystems Engineering,
Auburn University, Auburn, Alabama, USA;
Department of Economics, TSYS School of Computer Science,
Columbus State University, Columbus, Georgia, USA
0. Classification of Heart Rate Variability (HRV) based on Attention
Mechanism of Transformer Model
Shijun Tang
Department of Computer Science, Schreiner University,
Kerrville, Texas, USA
0. EEGNet-Vision Transformer Ensemble Model with Pseudo Labeling for
Epilepsy Patients Seizure Prediction from EEG
Hyoseop Shin, Geun-Hyeong Kim, Seung Park
Medical Artificial Intelligence Center, Chungbuk National University
Hospital, Cheongju-si Chungcheongbuk-do, Republic of Korea;
College of Medicine Chungbuk National University, Medical Artificial
Intelligence Center, Chungbuk National University Hospital,
Cheongju-si, Republic of Korea;
College of Medicine Chungbuk National University, Department of
Biomedical Engineering, Chungbuk National University Hospital,
Mediv Corp, Cheongju-si, Republic of Korea
0. Advancing Fall Detection and Prevention: Integrating Wearable Devices
and a Camera-Based Analysis
Mark Ziyi Zhu, Alexdander Xiaoxiang Zhou, Boya Hou, Chris Cheng Zhang
The University of British Columbia, Vancouver, BC, Canada;
Sentinel Secondary School, West Vancouver, BC, Canada;
Burnaby North Secondary School, Burnaby, BC, Canada;
Department of Research and Development, Canada Youth Robotics Club,
Vancouver, BC, Canada
0. Internet-of-Things Chair and the 30 Second Chair Stand Test
Melissa S. Lee, Alexander W. Lee, Philipp Schroeder, Chelsea Yeh, Kyle Yeh
Chino Premier Surgery Center, Chino, California, USA;
Walnut Valley Research Institute, Walnut, California, USA;
Yale University, New Haven, Connecticut, USA;
Brown University, Providence, Rhode Island, USA
VIDEO: <https://youtu.be/y1ScMXP4hQI>

**The 22nd International Conference on Scientific Computing
(CSC'24: July 22-25, 2024; Las Vegas, USA)
<https://american-cse.org/csce2024/conferences-CSC>**

0. Acquisition and Analysis of Mobile Data using Digital Forensics Tools and Techniques
Yahya Sayeed, Ali A. Jalooli, Mehrdad S. Sharbaf
Department of Computer Science, California State University Dominguez Hills, Carson, California, USA
0. A Novel Deep Learning Method for Solving PDE's Applied to a Shallow Water Problem
Jose Palacios-Garcia, Julio Ibarra-Fiallo, Servando Espin-Torres
Colegio de Ciencias e Ingenierias Universidad San Francisco de Quito, Cumbaya, Ecuador
0. Scientific Constructing Adequate Statistical Decision Rules under Parametric Uncertainty of Applied Mathematical Models via the Smart Use of Pivotal Quantities and Ancillary Statistics
Nicholas Nechval, Gundars Berzins, Konstantin Nechval
BVEF Research Institute, University of Latvia, Riga, Latvia;
Mathematics Department, Riga Aeronautical Institute, Riga, Latvia
VIDEO: <https://drive.google.com/file/d/1l53utmVyF35Z4lhLUm0S8z6bC4cGXZJM/view>
0. A Smart Air Quality Analysis and Pollutant Diffusion Detection and Prediction System Based on Tree Canopy Shape Research Using Machine Learning and Artificial Intelligence
Mingyuan Liu, Ang Li
Montverde Academy Shanghai, Shanghai, China;
EECS Department, California State University, Long Beach, California, USA
0. A High Order Scheme for Modelling Viscous Incompressible Fluid Flow in a Channel with a Step
Saeed M. Dubas
Engineering and Computer Science Division,
University of Pittsburgh at Johnstown, PA, USA
0. Regret-minimization Heuristics for Identifying Monotone Boolean Functions
Michael Laszlo, Sumitra Mukherjee
Nova Southeastern University, Fort Lauderdale, Florida, USA
VIDEO: https://drive.google.com/file/d/1nJdpdq0-DNpqtWH5ZFw84l_zmXuZUrxD/view
0. Feasibility Study of Neutron Mammography Using MCNPX with a Breast Voxel Anthropomorphic Phantom
Ali A. A. Alghamdia, Andy KW Ma, M. H. A. Mhareb, Gameel Saleh, E Abuelhia, Hamed A. Alshammari, D. A. Bradley
Department of Radiological Sciences, College of Applied Medical Science, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia;
School of Medicine, Royal College of Surgeons in Ireland-Bahrain, Adliya, Bahrain;
Department of Physics, College of Science, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia;
School of Mathematics and Physics, University of Surrey, Guildford, UK
VIDEO: <https://youtu.be/uXGJzhIvzWA>
0. Scalable Service Model and Scheduler for Delay-Sensitive Services
Csaba Lukovszki, Jozsef Biro
Department of Telecommunications and Artificial Intelligence,
Faculty of Electrical Engineering and Informatics, Budapest University of Technology and Economics, Budapest, Hungary
VIDEO: https://drive.google.com/file/d/10i-AHYKM0U8TtOU-xLPgH67ek6quHDj_/view?usp=sharing

**The 23rd International Conference on e-Learning, e-Business,
Enterprise Information Systems, & e-Government
(EEE'24: July 22-25, 2024; Las Vegas, USA)
<https://american-cse.org/csce2024/conferences-EEE>**

- 0. Using Survey to Investigate the Integration of Artificial Intelligence in e-Learning
Yi Tao, Zijiang Yang, Ethan Boyi Zhang
St. Robert Catholic High School, Thornhill, Canada;
School of Information Technology, York University, Toronto, Canada
VIDEO: <https://youtu.be/arFJHAsYvt8>
- 0. Farmchain: Empowering Smallholder Farmers through Blockchain and DAOs: Cryptouronomic Approach
Sasan Bahrami, Kevin Aragon, Michael G. Wagner
Digital Media, Westphal College of Media Arts and Design,
Drexel University, Philadelphia, USA;
MaCT01, Institute for Advanced Architecture of Catalonia, Barcelona, Spain
VIDEO: <https://youtu.be/lS1fZ6JAzY>
- 0. Students Satisfaction with the Distance Education During Covid-19 Pandemic
Omar Ahmad Masmali
Department of Computer Technology, Dammam College of Technology,
Dammam, Saudi Arabia
- 0. Cybersecurity Threats: An Analysis of the Rise and Impacts of State Sponsored Cyber Attacks
Patrick Butler, Jayden Kelley, Justin Ellis, Samuel Olatunbosun
Norfolk State University, Norfolk, Virginia, USA
- 0. A Self-Assessment Tool to Empower Police Officers' Online Protection
Petra Saskia Bayerl, Marcel Obst, Jack Spencer, Martin Snowden, and Babak Akhgar
CENTRIC (Centre of Excellence in Terrorism, Resilience, Intelligence and Organised Crime Research), Sheffield Hallam University,
Sheffield, UK
VIDEO: <https://shu.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=2dfa0998-60b0-4e88-95d3-b1ae00e1582e>
- 0. Moore's Law: What Comes Next?
Aimee Hatfield, Abdel-Hameed A. Badawy
Klipsch School of Electrical and Computer Engineering, New Mexico
State University, Las Cruces, New Mexico, USA
VIDEO: <https://www.youtube.com/watch?v=mNMwL6bcM0w>

The 22nd International Conference on Embedded Systems,
Cyber-physical Systems, & Applications
(ESCS'24: July 22-25, 2024; Las Vegas, USA)
<https://american-cse.org/csce2024/conferences-ESCS>
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The 20th International Conference on Foundations
of Computer Science
(FCS'24: July 22-25, 2024; Las Vegas, USA)
<https://american-cse.org/csce2024/conferences-FCS>

- 0. Time Series Analysis for Detecting Anomalous Behavior using a Mobile Device
Maruthi Prasanna Chellatore, Rishitha Reddy Pesaladinne, Sharad Sharma
Department of Information Science, University of North Texas,
Denton, Texas, USA
- 0. MultiMap Implementation in OpenJDK
Nishant Yadav, Robert Chun
Computer Science, San Jose State University, California, USA
- 0. A Novel Simple Data Structure for Selecting Inserting and Deleting in Square Root Time
Hongyi Liu, Andre Mello Fortes (Chris Zhang)
Steveston-London Secondary School, Richmond, British Columbia, Canada;
Sager Education Inc., Canada
- 0. The Evolution of Computer Science Education
Yusuf Pisan, Taylor Eyler, Erica Ferguson, David Liu
Computing & Software Systems, University of Washington Bothell,
Bothell, Washington, USA
- 0. TOIChain(TM) - A Proposal for High Performance Tamper Resistant Transactions without Scaling Limits
Justin Y. Shi
SMC Labs, LLC, Collegetown, Pennsylvania, USA

**The 20th International Conference on Frontiers in
Education: Computer Science & Computer Engineering
(FECS'24: July 22-25, 2024; Las Vegas, USA)
<https://american-cse.org/csce2024/conferences-FECS>**

- 0. Navigating the Ethical Landscape of Big Data Collection and Analysis
Nick Rahimi, Sarah Lee
School of Computing Sciences & Computer Engineering,
The University of Southern Mississippi, Hattiesburg, Mississippi, USA
- 0. Capstone Projects as Ventures to New Knowledge
Hong Wang, Robert Allen Langenderfer
Computer Science and Engineering Technology,
The University of Toledo, Toledo, Ohio, USA
- 0. Learning from the Arts: Incorporating Classroom Critiques in a Computer
Science Course
Sonya Cates
School of Engineering, Computing, and Construction Management,
Roger Williams University, Bristol, RI, USA
- 0. Unravelling Dropout Intentions: Multifaceted Factors Influencing Student
Retention in Computer Science Education
Alfia Pervez, Sakina Rao, Arshia Khan, Sherri Turner, Anne Hinderliter
Computer Science Department, University of Minnesota - Duluth,
Duluth, Minnesota, USA
- 0. Mentoring STEM Students by Faculty: A Literature and Expert Panel Review
Sherri Turner, Anne Hinderliter, Arshia Khan
Computer Science Department, University of Minnesota - Duluth,
Duluth, Minnesota, USA
- 0. Integrating Technical Problem-Solving Skills Into Data Structures and
Algorithms Course
Yusuf Pisan
University of Washington Bothell, Washington, USA
- 0. Exploring the Potential of Generative AI in Education: Opportunities,
Challenges, and Best Practices for Classroom Integration
Cordero Jorge, Cordero-Castillo Alison
Universidad Tecnica Particular de Loja, Loja, Ecuador

**The 10th International Conference on
Health Informatics & Medical Systems
(HIMS'24: July 22-25, 2024; Las Vegas, USA)
<https://www.himscsce.org/hims24/>
<https://www.american-cse.org/csce2024/>**

0. Enhancing Diabetes Mellitus Prediction: A Comparative Study of Random Forest and Stacking Ensemble Methods
Adedeji Olugboja, Abu Kamruzzaman
Department of Business and Economics, York College of the City University of New York (CUNY), Jamaica, New York, USA
0. Duration and Measurements of Dementia Progression: A Systematic Review
Arshia Khan, Isra Hassan, Matthew Sawchuk, Sakina Rao, Alfia Parvez, and Minza Nadeem Khan
Computer Science Department, University of Minnesota - Duluth, Duluth, Minnesota, USA
0. Ethical Perspectives into the Utilization of Health Informatics for Cancer Care
Ashiat Ashake Adeogun, Misagh Faezipour
College of Basic and Applied Sciences, Healthcare Informatics, Middle Tennessee State University, Murfreesboro, Tennessee, USA;
Department of Engineering Technology, Middle Tennessee State University, Murfreesboro, Tennessee, USA
VIDEO: <https://www.youtube.com/watch?v=DwSoyEkkVvY>
0. Gender Differences in Robot Acceptance
Yagna Manasa Boyapati, Arshia Khan
Computer Science Department, University of Minnesota - Duluth, Duluth, Minnesota, USA
0. Integrative Stress Assessment: A Triangulated Approach Using Psychological, Biochemical, and Physiological Measures
Sakina Rao, Alfia Parvez, Arshia Khan
Computer Science Department, University of Minnesota - Duluth, Duluth, Minnesota, USA
0. Emotional Landscapes: Family and Staff Perceptions of Robotic Assistants in Caregiving Settings
Yagna Manasa Boyapati, Alfia Parvez, Sakina Rao, Arshia Khan, Donna Bliss, Teresa McCarthy
Computer Science Department, University of Minnesota - Duluth, Duluth, Minnesota, USA;
School of Nursing Foundation, University of Minnesota, USA;
Department of Family Medicine and Community Health, University of Minnesota, USA
0. Gender Differences in Working Memory - A Holistic Review
Alfia Parvez, Arshia Khan
Computer Science Department, University of Minnesota - Duluth, Duluth, Minnesota, USA
0. Gender-Specific Risk Factors for Dementia: Exploring the Unique Vulnerabilities in Women
Sakina Rao, Arshia Khan
Computer Science Department, University of Minnesota - Duluth, Duluth, Minnesota, USA

0. Effects of Breathing Exercises on Cognition: A PRISMA Guided Systematic Review
Sakina Rao, Arshia Khan
Computer Science Department, University of Minnesota - Duluth, Duluth, Minnesota, USA
0. Modernizing Medicine Through a Proof of Concept That Studies the Intersection of Robotic Exoskeletons, Computational Capacities and Dementia Care
Ritwik Raj Saxena, Arshia Khan
Computer Science Department, University of Minnesota - Duluth, Duluth, Minnesota, USA
0. Modeling the Dynamics of Infectious Diseases in a College Campus: A Case Study of the 2016 Harvard Mumps Outbreak
Lateefat Amao, Misagh Faezipour
College of Basic and Applied Sciences, Healthcare Informatics, Middle Tennessee State University, Murfreesboro, Tennessee, USA;
Department of Engineering Technology, Middle Tennessee State University, Murfreesboro, Tennessee, USA
VIDEO: <https://www.youtube.com/watch?v=HYIdktFFR8s>
0. Prediction of the Outcomes of SSRI Therapy for Depressed Patients using Tuned Q-factor Wavelet Transform and EEG Signals
Hesam Akbari, Wael Korani, Priyan Malarvizhi Kumar
Department of Information Science, University of North Texas, Texas, Denton, USA
0. Prediction of the Outcomes of Repetitive Transcranial Magnetic Stimulation for Depressed Patients using Neural Networks and EEG Signals
Hesam Akbari, Wael Korani, Priyan Malarvizhi Kumar, Reza Rostami, and Reza Kazemi
Department of Information Science, University of North Texas, Denton, Texas, USA;
Department of Psychology, University of Tehran, Tehran, Iran;
Department of Cognitive Psychology, Institute for Cognitive Science Studies, Tehran, Iran
0. A Respite Work Exchange Service Mechanism based on Blockchain Technology
Yu-Hui Wang, Lun-Ping Hung, Shih-Yang Yang, Chia-Chen Wang
Department of Information Management, National Taipei University of Nursing and Health Sciences, Taipei, Taiwan;
Department of Media Arts, University of Kang Ning, Taipei, Taiwan;
Department of Information Management, Aletheia University, New Taipei, Taiwan
0. Surgical Tool Detection: A Comparative Study of Supervised and Semi-Supervised Learning Approaches
Shiva Shokouhmand, Md Motiur Rahman, Smriti Bhatt, Suranjan Panigrahi, and Miad Faezipour
School of Engineering Technology, Electrical & Computer Engineering Technology, Purdue University, West Lafayette, Indiana, USA;
Department of Computer and Information Technology, Purdue University, West Lafayette, Indiana, USA
VIDEO: <https://youtu.be/HMgkqDq2ZFE>

- 0. Predicting Efficacy of Cancer Drug Combinations Using Machine Learning
Wenting Liu, Flora Rajaei, Kayvan Najarian
Department of Computational Medicine and Bioinformatics, University of Michigan, Ann Arbor, Michigan, USA;
Max Harry Weil Institute for Critical Care Research and Innovation, Michigan Institute for Data Science (MIDAS), Center for Data-Driven Drug Development and Treatment Assessment (DATA), University of Michigan, Ann Arbor, Michigan, USA

- 0. Cardiac Valvular Diseases Classification Using Statistical Features and Machine Learning
Hanan S. Murayshid, Khalid Al Dhafeeri, Turki Alotaiby, Gaseb N. Alotaibi, Adel Alshehri
AI and Robotics Institute, King Abdulaziz City for Science and Technology (KACST), Riyadh, Saudi Arabia;
Department of CS and Information, Imam Abdulrahman Alfisal University, Riyadh, Saudi Arabia;
Department of CS and IT, University of Tabuk, Tabuk, Saudi Arabia

- 0. Transformer-Based Encoder Method for Classification of Heart Rate Variability (HRV)
Shijun Tang
Department of Computer Science, Schreiner University, Kerrville, Texas, USA

- 0. Electronic Health Record Summarization via LLM-constructed Knowledge Graph
Tristram Dacayan, Daniel Ojeda, Daehan Kwak
Department of Computer Science and Technology, Kean University, Union, New Jersey, USA

**The 26th International Conference on Artificial Intelligence
(ICAI'24: July 22-25, 2024; Las Vegas, USA)
<https://american-cse.org/csce2024/conferences-ICAI>**

- 0. The Evolutional Treasury Hybrid Optimization System (ETHOS)
N. Loukeris, G. Chalamandaris, I. Eleftheriadis
Department of Business Administration, University of West Attica,
Athens, Greece;
Department of Accounting & Finance, Athens University of Economics and
Business, Athens, Greece;
Department of Business Administration, University of Macedonia,
Thessaloniki, Greece
- 0. The Evolutional Portfolio Optimization System (EPOS)
N. Loukeris, Y. Boutalis, I. Eleftheriadis, A. Arampatzis, S. Livanis
Department of Business Administration, University of West Attica,
Athens, Greece;
Department of Business Administration, University of Macedonia, Greece;
Department of Accounting and Finance, University of Macedonia, Greece;
Department of Electrical and Computer Engineers,
Democritus University of Thrace, Greece
- 0. Lookahead Secured AI/ML Platforms
Yong-Kyu Jung
Electrical & Cyber Engineering, Gannon University, Erie, Pennsylvania, USA
- 0. A Voxel-representation-based Data Generator of Adversarial Objects for
Robotic Manipulators
Akshay, Garrett E. Katz, Chilukuri K. Mohan
Department of EECS, Syracuse University, Syracuse, New York, USA
- 0. Exploring Poverty Factors through Predictive Modeling
Anatoli Nachev
Business Information Systems, University of Galway, Galway, Ireland
VIDEO: <https://app.screencast.com/1opmeOpFjImUc>
- 0. Comparative Analysis of Statistical Machine Learning and Deep Learning
Approaches for Forecasting News Popularity on Social Media Platforms
Sai Krishna Maddukuri, Devinder Kaur
Electrical Engineering & Computer Science, University of Toledo,
Toledo, Ohio, USA
VIDEO: <https://youtu.be/G3Qp3DaqN48>
- 0. Analyzing Gender Polarity in Short Social Media Texts with BERT: The Role
of Emojis and Emoticons
Saba Yousefian Jazi, Amir Mirzaeinia, Sina Yousefian Jazi
Department of Computer Science and Engineering, University of
North Texas, Denton, Texas, USA;
Independent Researcher, Santa Clara, California, USA
- 0. Induction of Association Rules Using Mapping and Sorting
Lixin Fu, Naga Lakshmi
Department of Computer Science, University of North Carolina,
Greensboro, North Carolina, USA
- 0. Automatic Labeling of Computer Vision Data Using Self-Supervised Learning
Abdulghani M. Abdulghani, Wilbur L. Walters, Khalid H. Abed
Jackson State University, Jackson, Mississippi, USA

- 0. Object Detection and Counting Using Voice Recognition for Real-Time Human-Machine Teaming Tasks
Mokhles M. Abdulghani, Wilbur L. Walters, Khalid H. Abed
Jackson State University, Jackson, Mississippi, USA
- 0. Object Detection and Counting Using YOLOV7 for Human-Machine Interaction Tasks
Abdulghani M. Abdulghani, Wilbur L. Walters, Khalid H. Abed
Jackson State University, Jackson, Mississippi, USA
- 0. Voice-Based Object Detection and Counting with Speaker Identity Verification for Human-Machine Interactions Tasks
Mokhles M. Abdulghani, Wilbur L. Walters, Khalid H. Abed
Jackson State University, Jackson, Mississippi, USA
- 0. Towards the Generation of Learning Objects with Generative Artificial Intelligence
Aiden Black, Guillermo Francia, III
Department of Cybersecurity, University of West Florida, Pensacola, Florida, USA;
Center for Cybersecurity, University of West Florida, Pensacola, Florida, USA
VIDEO: <https://drive.google.com/file/d/1SJMOu93EDGYP7FwChbPzm4ZyTMNArBJo/view?usp=sharing>
- 0. 3D Artistic Images Generation from 2D Images Using Improved Wasserstein Generative Adversarial Networks
Dorcas Oladayo Esan, Pius Adewale Owolawi, Chunling Tu
Department of Computer Systems Engineering, Tshwane University of Technology, Pretoria, South Africa
VIDEO: <https://youtu.be/Xn7runRAb04>
- 0. Enhancing Irrigation Efficiency with a Unified Stochastic Decision Tree Model: Predictive Analysis of Stem Water Potential in Almond and Pistachio Orchards
Azar Alizadeh, Mehrad Mortazavi, Mohsen Farajijalal, Arash Toudeshki, Reza Ehsani, Mukesh Singhal
Department of Electrical Engineering and Computer Science, University of California Merced, California, USA;
Department of Mechanical Engineering, University of California, Merced, California, USA
VIDEO: <https://youtu.be/dUU9n-vGhC4>
- 0. Performance Evaluation of Human-Machine Interaction for Safely Navigating Agent in Unity Environment
Abdulghani M. Abdulghani, Wilbur L. Walters, Khalid H. Abed
Jackson State University, Jackson, Mississippi, USA
- 0. Evaluating Artificial Intelligence Robustness Against FGSM and PGD Adversarial Attacks with L-norms Perturbations
Ahmeed A. Yinusa, Misagh Faezipour
Computational and Data Science Program, Middle Tennessee State University, Murfreesboro, Tennessee, USA;
Department of Engineering Technology, Middle Tennessee State University, Murfreesboro, Tennessee, USA
- 0. UAV-Assisted Car Accident Examination
Joud Faisal Al-Twaim, Adeem Turki Alotaibi, Lamyaa Nasser Alrayes, Noura Ali Alhenaki, Lamees Alhazzaa
College of Computer Science and Information,
Al Imam Mohammad Ibn Saud Islamic University, Riyadh, Saudi arabia

0. Deep Reinforcement Learning Strategies in Finance: Insights into Asset Holding, Trading Behavior, and Purchase Diversity
Alireza Mohammadshafie, Akram Mirzaeinia, Haseebullah Jumakhan, and Amir Mirzaeinia
Computer Science and Engineering, University of North Texas, Denton, Texas, USA;
Independent Researcher, Ajman, United Arab Emirates (UAE);
Artificial Intelligence Research Center (AIRC), Ajman University, Ajman, United Arab Emirates (UAE)
0. Room Generation System on VR Space by Selecting Furniture According to User's Sensitivity
Misako Imono, Seiji Tsuchiya, Hirokazu Watabe
Department of Information Systems, Daido University, Nagoya, Japan;
Department of Intelligent Information Engineering and Science, Doshisha University, Kyoto, Japan
0. Gradient Reduction Convolutional Neural Network Policy for Financial Deep Reinforcement Learning
Sina Montazeri, Haseebullah Jumakhan, Sonia Afrasiabian, Amir Mirzaeinia
Computer Science and Engineering, University of North Texas, Denton, USA;
Artificial Intelligence Research Center (AIRC), Ajman University, Ajman, United Arab Emirates
0. Automatic Detection of Errors in LLM Large Benchmarks Using Frontier Model Consensus
Carlos Toxtli, Cecilia Delgado-Solorzano, Manuel Delaflor
Clemson University, South Carolina, USA;
Ayeka Research Centre
0. Large Language Models Prompt Engineering: Principles and Techniques
Anoushka Popuri, John Miller
Francis Howell School District, O Fallon, Missouri, USA
0. Orthogonal Activation Functions in Neural Networks: Utilizing Chebyshev, Legendre, and Hermite Polynomials
Saeid Safaei, Khaled Rasheed, Thiab Taha, Vahid Safaei, Budak Arpinar, Juan B. Gutierrez, Hamid R. Arabnia
University of Georgia, Athens, Georgia, USA;
University of Isfahan, Isfahan, Iran;
University of Texas at San Antonio, San Antonio, Texas, USA
0. An Investigation of Methods for Improving Spatial Invariance of Convolutional Neural Networks for Image Classification
David Noel, Sumitra Mukherjee
College of Computing and Engineering, Nova Southeastern University, Fort Lauderdale, Florida, USA
0. Artificial Intelligence based Automatic Product Recognition for Toys Retail Stores
Cristina Hava Muntean, Aditi Bharadwaj, Rohit Verma
School of Computing, National College of Ireland, Dublin, Ireland
0. Predictive Modeling of Shading Effects on Photovoltaic Panels Using Regression Analysis
Jonathan Olivares, Tyler Depe, Kanika Sood, Rakeshkumar Mahto
Department of Electrical and Computer Engineering,
California State University, Fullerton, California, USA;
Department of Computer Science, California State University, Fullerton, California, USA

- 0. Bridging the Gap: The Sentiment of User Reviews and 5-Star Ratings
Maliha Haider, Bin Hu, Daehan Kwak
Department of Computer Science and Technology,
Kean University, Union, New Jersey, USA
- 0. Leveraging Data Augmentation and Large Language Models for Enhanced COVID-19 Tweet Classification
Eric Landaverde, Adam Spencer, Daehan Kwak
Department of Computer Science and Technology, Kean University,
Union, New Jersey, USA
- 0. Enhancing Clinical Documentation Through NLP-driven Disease Categorization and Visualization: A Case Study Utilizing the Llama2 AI Model
Bhavraaj Singh, Atif Farid Mohammad, Muhammad Abdul Basit Ur Rahim
Department of Computer Engineering and Computer Science,
California State University, Long Beach, California, USA;
Department of Computer Science, University of the Cumberland,
Williamsburg, Kentucky, USA
- 0. Unleashing the Lifesaving Potential: A Deep Dive into Responsible AI Use
Atif Farid Mohammad, Matt Jacoby, Parnjal Sharma, Kaushik Busi, and
Vamsee Kotha
Global Technology Systems (GTS), City of Cary, NC, USA
- 0. A Review of Uncertainty Quantification in Convolutional Neural Networks
Sina Montazeri, Pooya Tavallali
Independent Researcher, Cambridge, USA
Computer Science and Engineering, University of North Texas,
Denton, Texas, USA;

The 20th International Conference on Data Science
(ICDATA'24: July 22-25, 2024; Las Vegas, USA)
<https://icdatascience.org/>
<https://www.american-cse.org/csce2024/>
+
The 23rd International Conference on Information
& Knowledge Engineering
(IKE'24: July 22-25, 2024; Las Vegas, USA)
<https://american-cse.org/csce2024/conferences-IKE>

- 0. DataDock: An Open Source Data Hub for Research
Lexington Whalen, Homayoun Valafar
Department of Computer Science and Engineering,
University of South Carolina, Columbia, USA
- 0. Artificial Intelligence Data Reduction Algorithm for Streaming Readout
in High Energy Physics Experiment
Marco Battaglieri, Fabio Rossi, Paolo Gastaldo, Edoardo Ragusa
Istituto Nazionale di Fisica Nucleare, Genova, Italy;
University of Genoa (Italy)
- 0. Mobile Application for Conducting Time Series Analysis on Location-Based
Spatial Data
Bhoj Raj Bhatt, Shikhar Sharma
Department of Information Science, University of North Texas,
Denton, Texas, USA;
Wakeland High School, Frisco, Texas, USA
- 0. Proactive Management of Delays in the French Railway Network: A Seasonal
Machine Learning Based Approach
Prachi Mahajan, Paul Stynes, Cristina Hava Muntean
School of Computing, National College of Ireland, Dublin, Ireland
- 0. Models for Security Management
Christopher Spruill, Md Khalil, Samuel Olatunbosun
Norfolk State University, Norfolk, Virginia, USA
- 0. A Comprehensive Analysis of Information Security Policy and Security
Program Development
Salim Jackson, Willis Dunn, Samuel Olatunbosun
Norfolk State University, Norfolk, Virginia, USA
- 0. Real-Time AI Voice Clone Detection: A Deep Learning Approach to
Safeguard Authenticity
Thaier Hayajneh, Cody Chen
Fordham University, USA
- 0. Application of Transformer Models for Demand Forecasting in FMCG Industry
Vineeth Pydi, Liana Simopoulos, Nicholas Zimmerman, Pratiksha Gupta,
and Nikolai Saporoschetz
Purdue University, USA
- 0. Enhancing Financial Analysis with Generative AI: Utilizing Large Language
Models for Efficient Data Extraction
Durga Madhab Dash, Matthew Lanham, Soham Agarwal,
Anto Fredric Henry Mohan Dass, Sai Bheeshma Ramaraju Pagilla,
Chaitanya Varma Sanaboina, Ashwin Mishra
Purdue University, USA

- 0. Scalable Image Search Engine
Fatemeh Sarayloo, Adharsh Madhusudan Madhusudan, Kushal Adity,
Ming-Jen Chang, Siji Adisa, Vinay Khandelwal
University of Illinois at Chicago, USA
- 0. Review of Emerging Threats in Cyberspace: A Replicated Study Based on a
Year 2022 Research
Devonte W. Bethea, Samuel Bo Olatunbosun
Norfolk State University, Norfolk, Virginia, USA
- 0. Cybersecurity: Sight and Foresight
Kevin Brodie, Samuel Olatunbosun
Norfolk State University, Norfolk, Virginia, USA
- 0. CNN to BiLSTM: Enhancing Setswana Named Entity Recognition
Shumile Chabalala, Pius Owolawi, Sunday Ojo
Tshwane University of Technology, South Africa
- 0. SynthFair: Ensuring Subgroup Fairness in Classification via Synthetic
Data Generation
Begum Hattatoglu, Abdulhakim A. Qahtan, Heysem Kaya, Yannis Velegarakis
Utrecht University, Netherlands
- 0. Enhancing Security with Automated Boom Gate Access through License Plate
Recognition utilising YOLOv8 Model
Christine Asaju, Pius Owolawi, Chunling Du, Etienne Van Wyk
Tshwane University of Technology, South Africa
VIDEO: <https://youtu.be/MstaX7SyU5s>
- 0. FIONA: Detecting Syntactical Outliers in Attributes with
Categorical Values
Abdulhakim A. Qahtan, Thanos Tsiamis
Utrecht University, Netherlands
- 0. Leveraging Ensemble Learning Paradigms for B2B E-Commerce Fraud Detection
Sai Kiran Reddy Malikireddy, Subhayan Roy, Shivani Fnu, Tanvi Bagwe,
and Rewati Ovalekar
Walmart, USA
- 0. Protecting the Whisper: A Security Assessment of Amazon CodeWhisperer's
Generated Code
Thaier Hayajneh, Gabriel Araujo
Fordham University, USA
- 0. TGAIn: Missing Data Imputation for Mixed-Type Relational Datasets using
Generative Adversarial Networks
Ouassim Bannany, Abdulhakim A. Qahtan
Utrecht University, Netherlands
- 0. Generative AI Techniques for the Simulation of Groundwater Well Data at
Hanford Site
Fabiola Rivera Noriega
Florida International University, Florida, USA
- 0. The Rising Threat Against Modern Technology in Cybersecurity
Rashel Dibi, Samuel Olatunbosun
Norfolk State University, Norfolk, Virginia, USA

- 0. Comprehensive Analysis and Detection of Fraud Schemes on the Ethereum Blockchain Using Machine Learning
Thaier Hayajneh, Kayla Ramdass, Maria Chano, Mohamed Rahouti
Fordham University, USA
- 0. Predicting NVIDIA's Next-Day Stock Price: A Comparative Analysis of LSTM, MLP, ARIMA, and ARIMA-GARCH Models
Yiluan Xing, Chao Yan, Cathy Chang Xie
Indiana University Bloomington, Indiana, USA
- 0. Generative AI use in One Health, One System as Healthcare is Global
Muhammad Abdul Basit Ur Rahim, Atif Farid Mohammad
California State University Long Beach, California, USA
- 0. Generating Culturally Appropriate Avatars
Zeeshan Gilani
Purdue University, USA
- 0. The Use of Social Media and the Internet for the Facilitation of Human Trafficking
Maria Paulina Ramirez, Samuel Olatunbosun
Norfolk State University, Norfolk, Virginia, USA
- 0. Cybersecurity Techniques, Emerging Threats, and Industry Responses
Momo A. Tulay, Samuel Olatunbosun
Norfolk State University, Norfolk, Virginia, USA
- 0. Exploring Equity: Integrating Knowledge Graphs in Fairness Testing Methodologies
Jonathan Dabu, Muhammad Abdul Basit Ur Rahim, Muhammad Abid, and Shahid Hussain
California State University Long Beach, California, USA
VIDEO: <https://www.youtube.com/watch?v=yDqukP0ys1s>
- 0. Leveraging NLP and Large Language Models for Clinical Documentation Improvement: A Medical AI Chatbot Approach
Bhavraaj Singh, Atif Farid Mohammad, Muhammad Abdul Basit Ur Rahim
California State University Long Beach, US

**The 3rd International Conference on Emergent
Quantum Technologies
(ICEQT'24: July 22-25, 2024; Las Vegas, USA)
<https://baylor.ai/iceqt/>
<https://www.american-cse.org/csce2024/>**

- 0. Integrating Secure Quantum Digital Signature into Quantum Communications
Ahmad O. Hijaz, Ibrahim Yakubu, Jinsuk Baek
Department of Computer Science, University of North Carolina Greensboro,
North Carolina, USA;
Department of Computer Science, Winston-Salem State University,
North Carolina, USA
VIDEO: <https://youtu.be/LsRo4b2BGd0>
- 0. Learning Robust Observable to Address Noise in Quantum Machine Learning
Bikram Khanal, Pablo Rivas
Department of Computer Science, Baylor University, Waco, Texas, USA
- 0. Methodology to Accelerate Defense and Federal Agency Adoption of Quantum
Technologies
James Hornage
Capitol Technology University, Maryland, USA
- 0. Federal Cloud Computing Adoption Case Study: A Retrospective Analysis as
a Precursor to Optimized Quantum Adoption Methodologies
James Hornage
Capitol Technology University, Maryland, USA

The 25th International Conference on Internet
Computing & IoT
(ICOMP'24: July 22-25, 2024; Las Vegas, USA)
<https://american-cse.org/csce2024/conferences-ICOMP>

0. IoT-based Analysis of Environmental and Motion Data for Comfort and Energy Conservation in Optimizing HVAC Systems
Badmus Abdulwaheed, Ken McGarry, David Baglee, Neil Eliot
School of Engineering, Faculty of Technology, University of Sunderland, UK;
School of Computer Science, Faculty of Technology,
University of Sunderland, UK
VIDEO: <https://youtu.be/JY71etRCYv0>
0. DRIVE: A Mobile Application for Directed, Remote, Interactive Viewing and Exploring
Sonya Cates, Rudolph Desanti, Roderick Ramirez, Kyle Witham
School of Engineering Computing and Construction Management,
Roger Williams University, Bristol, Rhode Island, USA
0. Autonomous Driving Prototype with Raspberry Pi by Using Image Processing Technology
Mert Kaval, Jerry Yinran Huang, Jinhui Shen, Yanxiao Wang, Haowei Ni, Lang Qin, Chris Zhang
Department of Research and Development, Cansight Technology Corp.,
Vancouver, BC, Canada;
Nanjing Foreign Language School, Nanjing, Jiangsu, China;
School of Broadcasting and Hosting Arts, Communication University of China, Nanjing, Jiangsu, China;
High School Affiliated to Nanjing Normal University, Jiangning Campus,
Nanjing, Jiangsu, China
Saint Patrick Regional Secondary School, Vancouver, BC, Canada;
0. A Data-Driven Driving Under the Influence (DUI) Detection, Notification and Prevention System using Artificial Intelligence and Internet-Of-Things (IoT)
Aaron Li, Yu Sun
Francis Parker School, San Diego, California, USA
Computer Science Department, California State Polytechnic University,
Pomona, California, USA;
0. Revolutionizing Multiplayer Gaming: A Deep Dive into VisionXO, a 3D Multiplayer Tic-Tac-Toe Game
Mihir Kanjibhai Daka, Jiaofei Zhong, Deepak Shivrambhai Antiya
Department of Computer Science, California State University East Bay,
Hayward, California, USA;
Oracle, America, Tracy, California, USA
0. Smart Roadway Monitoring: Pothole Detection and Mapping via Google Streetview
Shazab Ali, Meng Xu, Daehan Kwak
Department of Computer Science and Technology,
Kean University, Union, New Jersey, USA
0. Advancing Nursing Education through Virtual Reality Training: A Revolutionary Approach to Ensuring Patient Safety
Sai Lokesh Reddy Gayam, Jiaofei Zhong
Department of Computer Science, California State University East Bay,
Hayward, California, USA

0. Energy-Efficiency Modeling for AI Applications on Edge Computing
Vamsi Krishna Bhagavathula, Xian Gao, Yi Zhou, Rania Hodhod, Lixin Wang
TSYS School of Computer Science, Columbus State University,
Columbus, Georgia, USA

0. Collaborative Federated Learning Cloud Based System
Partha Pratim Saha, Naresh K. Sehgal, Miad Faezipour
Wipro Technologies Limited, Pune, Maharashtra, India;
Deeply Human AI, Inc., Santa Clara, California, USA;
Purdue University, School of Engineering Technology, Electrical &
Computer Engineering Technology, West Lafayette, Indiana, USA
VIDEO: <https://youtu.be/FrnB2nLlfXE>

0. Optimizing Wireless Sensor Network Node Placement Using Bacterial Foraging Optimization
Piyush Rawat, Naga Raghuram Chinnapurapu, Tiansheng Yang,
and Rajkumar Singh Rathore
Faculty of Engineering and Technology ITER, Siksha "O" Anusandhan
(Deemed to Be University), Bhubaneswar, India;
School of Computer Science, UPES, Dehradun, Uttarakhand, India;
Department of Electronics and Communication Engineering,
Velagapudi Ramakrishna Siddhartha Engineering College, Vijayawada,
Andhra Pradesh, India;
University of South Wales, Pontypridd, UK;
Cardiff School of Technologies, Cardiff Metropolitan University,
Llandaff Campus, Cardiff, UK

The 23rd International Conference on Wireless Networks
(ICWN'24: July 22-25, 2024; Las Vegas, USA)
<https://american-cse.org/csce2024/conferences-ICWN>

0. Classification of Radio Signal Modulations using Convolutional Neural Network
Caleb Hill, Byeong Kil Lee
Department of Electrical and Computer Engineering,
The University of Colorado, Colorado Springs (UCCS), Colorado, USA
0. A Prototype for Fire Detection based on Social Internet of Things
Francesco Carta, Daniele Loru, Martina Putzu, Mariella Sole,
Angelo Ledda, Andrea G. Piras, Alessio Chirigu, Daniele Giusto,
and Matteo Anedda
DIEE Department of Electrical and Electronic Engineering,
University of Cagliari - UdR CNIT Cagliari, Italy
0. Hybrid Differential Evolution Algorithm for Optimal WSN Node Deployment
Rahul Priyadarshi, Piyush Rawat, Naga Raghuram Chinnapurapu,
Tiansheng Yang, Rajkumar Singh Rathore
Faculty of Engineering and Technology, ITER, Siksha "O" Anusandhan
(Deemed to Be University), Bhubaneswar, India;
School of Computer Science, UPES, Dehradun, Uttarakhand, India;
Department of Electronics and Communication Engineering, Velagapudi
Ramakrishna Siddhartha Engineering College, Vijayawada,
Andhra Pradesh, India;
University of South Wales, Pontypridd, UK;
Cardiff School of Technologies, Cardiff Metropolitan University,
Llandaff Campus, Cardiff, UK

The 28th International Conference on Image Processing,
Computer Vision, & Pattern Recognition
(IPCV'24: July 22-25, 2024; Las Vegas, USA)
<https://american-cse.org/csce2024/conferences-IPCV>

- 0. Implications for Designing Hawks Detection with Data Augmentation and Network Optimizations
Adam Smith, Judah Small, Byeong Kil Lee
Department of Electrical and Computer Engineering,
The University of Colorado, Colorado Springs (UCCS), Colorado, USA
- 0. Residential Real Estate Image Classification for Property Valuation
Mehrdad Ziaee Nejad, Mohsen Naderpour, Vahid Behbood,
Fahimeh Ramezani, Jie Lu
Australian Artificial Intelligence Institute (AAIL), Faculty of
Engineering and IT, University of Technology Sydney (UTS), NSW, Australia
- 0. Deep Learning Techniques for Lunar Impact Crater Identification Based on CCD and DEM Data
Siyi Chen, Cheng Li, Yueqi Ma, Jiarui Liang, Jionghao Zhu, Xiaolin Tian
Macau University of Science and Technology, Macau, China;
The Chinese University of Hong Kong, Shenzhen, Guangdong, China
VIDEO: https://valvecrop-my.sharepoint.com/:v:/g/personal/csy_wiki_pw/EcC6_PQbzc9IsSuWJmHV1VsB1EXKb7Y63tjyqvF5RiiEhg?e=HEH42d
- 0. Lalitha: A Hand Gesture-Based Computer Control System
Tathagata Bhattacharya, Vinay Alsa, Akil Kumar Vujjini
Auburn University at Montgomery, Alabama, USA
- 0. Silicon Wafer Map Defect Classification Using Artificial Intelligence Models
Rushendar Pilli, Suranjan Panigrahi, Miad Faezipour
School of Engineering technology, Purdue University,
West Lafayette, Indiana, USA
VIDEO: <https://youtu.be/DhEXnYhwObE>
- 0. Detecting and Quantification of Cracks using CNN and Image Processing Techniques: A Review
Alanoud Abdulrahman Alhomoud, Reema Ibrahim Alshawi,
Shaikha Hussein Mokhlis, Shatha Khalid Alhazzani, Lamees Alhazzaa
Computer Science, Imam Mohammad Ibn Saud Islamic University,
Riyadh, Saudi Arabia
- 0. Weakly-supervised Video Anomaly Detection Using Modified Anomaly Score Module and Modified BERT
Jun-Xiang Chen, Jin-Jang Leou
Department of Computer Science and Information Engineering,
National Chung Cheng University, Taiwan, Republic of China
- 0. Low Light Image Enhancement Using Autoencoder-based Deep Neural Networks
Kuei-Yu Chen, Jin-Jang Leou
Department of Computer Science and Information Engineering,
National Chung Cheng University, Taiwan, Republic of China
- 0. A Review of Multi-Modal and Multi-View Applications in Hand-Drawn Sketch Images
Yunqi Xu, Ching Y. Suen
CENPARMI, Gina Cody School of Engineering and Computer Science,
Concordia University, Montreal, Quebec, Canada

**The 21st International Conference on Modeling,
Simulation & Visualization Methods
(MSV'24: July 22-25, 2024; Las Vegas, USA)
<https://american-cse.org/csce2024/conferences-MSV>**

- 0. Prediction of 1st Year Registration Renewal of General-use JP Domain Names Using Machine Learning
Takaharu Ui, Shota Ikehara, Kentaro Mori, Takeshi Ozaki, Hiroo Hirose
Suwa University of Science, Nagano, Japan;
Japan Registry Services Co., Ltd., Tokyo, Japan

- 0. Understanding Public Policy Effects on Alcohol-related Behaviors and Outcomes Using System Dynamics
Damilare Ogungbesan, Ashiat Ashake Adeogun, Aanuoluwapo Adekoya, and Misagh Faezipour
Healthcare Informatics Program, Middle Tennessee State University, Murfreesboro, Tennessee, USA;
Department of Engineering Technology, Middle Tennessee State University, Murfreesboro, Tennessee, USA

- 0. Performance Investigation of small UAV Attitude Control Based on Optimized Nonlinear Dynamic Inversion
Ahmed Mansour, Ahmed M. Kamel, Safa M. Gasser, Mohamed S. El-Mahallawy
Electronics and Communications Department, Arab Academy for Science and Technology, Cairo, Egypt;
Guidance Department, Military Technical College, Cairo, Egypt

**The 30th International Conference on Parallel &
Distributed Processing Techniques & Applications
(PDPTA'24: July 22-25, 2024; Las Vegas, USA)
<https://american-cse.org/csce2024/conferences-PDPTA>**

- 0. Is Manual Code Optimization Still Required to Mitigate GPU Thread Divergence? Applying a Flattening Technique to Observe Performance
Lucas Vespa
University of Illinois, Springfield, Illinois, USA

- 0. REFT: Resource-Efficient Federated Training Framework for Heterogeneous and Resource-Constrained Environments
Humaid Ahmed Desai, Amr Hilal, Hoda Eldardiry
Virginia Tech, Blacksburg, Virginia, USA;
Tennessee Tech University, Tennessee, USA

The 23rd International Conference on
Security & Management
(SAM'24: July 22-25, 2024; Las Vegas, USA)
<http://sam.udmercy.edu/sam24/>
<https://www.american-cse.org/csce2024/>

- 0. A Hybrid Risk Assessment Technique for Data Centers
Lorna Kangethe, Lei Chen
Department of Information Technology,
Georgia Southern University, Stateboro, Georgia, USA
- 0. Social Engineering: Financial and Psychological Effect
Francis Onodueze, Andre Kiah
Bowie State University, Maryland, USA
- 0. Network Intrusion Detection Based on Transformer Model
Shijun Tang
Department of Computer Science, Schreiner University,
Kerrville, Texas, USA
- 0. Applying Hyperledger Fabric to a Credit Transfer Process - A Case Study
Wilson Rojas Reales, Santiago Acevedo Rodriguez, Fabian Gomez Cespedes
Universidad El Bosque, Colombia
- 0. A Static Over-approximate Detection Tool for At-risk DLLs
Jack Berkowitz, Weihao Qu
Department of Computer Science and Software Engineering,
Monmouth University, West Long Branch, New Jersey, USA
- 0. Enhancing User Active Authentication Through Keystroke Dynamics: Analysis
of Individual Letter Characteristics and Classifier Performance
Alaa Darabseh, Xian Liu
Department of Mathematics, Engineering and Computer Science,
LaGuardia Community College, CUNY, New York, USA
- 0. Subject Matter Experts' Feedback on Cybersecurity Footprint Index Measures
to Assess Organizational Cyber Posture of Manufacturing Companies
John Del Vecchio, Yair Levy, Ling Wang, Ajoy Kumar
Nova Southeastern University, Florida, USA
- 0. Blockchain Technology Readiness in Engineering Project Management:
Industry Experts. Perspectives
Nana-Yao Nsowah, Kwame Assa-Agyei, Frederick Edem Junior Broni,
Selina Amoah, Daniel O.T. Ihenacho
Internal Audit Department, Kwahu Praso Rural Bank LTD., Nkawkaw, Ghana;
Department of Computer Science, Nottingham Trent University,
Nottingham, UK;
Computer Science and Engineering Department, University of Mines and
Technology, Tarkwa, Ghana;
School of Management Universite - Clermont Auvergne,
Clermont-Ferrand, France;
Department of Management Information Systems, University of Illinois,
Springfield, Illinois, USA
- 0. Value Embedding Approach for Access Control
Thanh Duc Bui, Brajendra Panda
Department of Electrical Engineering and Computer Science,
University of Arkansas, Fayetteville, Arkansas, USA
VIDEO: <https://youtu.be/k1tjREXm5wM>

- 0. An Adversarial Training Approach for Defending Against Object Misclassification in Smart Vehicles
Bennett Akpomedaye, Atef Shalan, Yiming Ji, Lei Chen
College of Engineering and Computing, Georgia Southern University, Statesboro, Georgia, USA
- 0. Comparative Analysis of Black Box Attacks in Information Security
Jordan Stuckey, Atef Shalan, Yiming Ji, Lei Chen
College of Engineering and Computing,
Georgia Southern University, Statesboro, Georgia, USA
- 0. Achieving Cyber Resilience in 5G-Enabled Microgrids Using Supervised Learning
Kim K. Trabant, Bryan Eidson, Preetha Thulasiraman
University of Armed Forces, Munich, Germany;
Naval Postgraduate School, Monterey, California, USA
VIDEO: https://nps01-my.sharepoint.com/:v:/g/personal/pthulas1_nps_edu/EW-vdG1Ggh1MkRpEsZuS55cB_XvbMvSmM9mY8f_L4K0j_A?e=ekb5X3
- 0. Unlocking the Power of Machine Learning in Cybersecurity Forensics: Identifying Malicious Files
Cemil Emre Yavas, Jiban Krisna Das, Bennett Akpomedaye, Lei Chen, and Yiming Ji
Department of Information Technology, Georgia Southern University, Statesboro, Georgia, USA
- 0. Blockchain based Auditing for Enhanced Cloud Security: A Systematic Review
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Department of Cybersecurity, King Hussein School of Computing Sciences, Prince Sumaya University for Technology, Jordan
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