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The 2025 World Congress in Computer Science, Computer Engineering, and Applied Computing (CSCE'25)

July 21-24, 2025, Luxor (MGM), Las Vegas, USA

PUBLISHER: Springer Nature

https://www.american-cse.org/csce2025/

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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 20 (Sunday): 04:00pm - 06:00pm July 21 (Monday): 07:00am - 05:00pm July 22 (Tuesday): 07:00am - 05:00pm July 23 (Wednesday): 07:00am - 05:00pm July 24 (Thursday): 07:00am - 02:00pm

(LOCATION: Ballrooms B & C)

BREAKFASTS: July 21 (Monday): 07:20am - 08:20am

July 22 (Tuesday): 07:20am - 08:20am July 23 (Wednesday): 07:20am - 08:20am July 24 (Thursday): 07:20am - 08:20am

(LOCATION: Ballrooms B & C)

DINNER: July 21 (Monday): 07:00pm - 09:00pm

(LOCATION: Velvet Room)

BREAKS: REFRESHMENTS

July 21 (Monday): 10:00am - 10:20am
July 21 (Monday): 03:00pm - 03:40pm
July 22 (Tuesday): 10:00am - 10:20am
July 22 (Tuesday): 03:00pm - 03:40pm
July 23 (Wednesday): 10:00am - 10:20am
July 24 (Thursday): 10:00am - 10:20am
July 24 (Thursday): 10:00am - 10:20am
July 24 (Thursday): 03:00pm - 03:20pm
(LOCATION: Ballrooms B & C)

04:00p - 06:00pm: REGISTRATION

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

<-----> LOCATION: Ballrooms Galleria D & E -----> 08:40 - 09:00am: CONGRESS WELCOME REMARKS - July 21, 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) 09:00 - 10:00am: KEYNOTE LECTURE - July 21, Monday: EMPOWERING CYBER DEFENSE: THE UCS ECOSYSTEM OF DATA, TOOLS, AND AWARENESS Dr. Arash Habibi Lashkari Canada Research Chair and Associate Professor in Cybersecurity + Founder and Director of the Behavior-Centric Cybersecurity Center (BCCC) + Co-founder and Director of the Cybersecurity Cartoon Award (CSCA) York University, Toronto, Canada (LOCATION: Galleria D & E) 10:00 - 10:20am: BREAK (Refreshments) (LOCATION: Galleria B & C; Registration Counter/Desk)

SESSION 1-MON (PDPTA TRACK): (CONCURRENT SESSION WITH ONLINE SESSIONS) SCOPE: INTERNATIONAL WORKSHOP ON MATHEMATICAL MODELING AND PROBLEM SOLVING (MPS) Co-Chairs: Prof. Miho Chiyonobu (Shiga University, Japan); Prof. Masahito Ohue (Institute of Science Tokyo, Japan); Prof. Nobuaki Yasuo (Institute of Science Tokyo, Japan); Prof. Masami Takata (Nara Women's University, Japan) July 21, 2025 (Monday); 10:20am - 12:20pm (LOCATION: Ballrooms Galleria D & E) 10:20 - 10:40am: Employment Method of Regression Machine Learning to Forecast Cherry Blossoms Miho Chiyonobu, Masami Takata Nara Women's University, Nara, Japan 10:40 - 11:00am: The Proposal of the Operational Model of an Autonomous Delivery Mobility System Utilizing Medium-Accuracy Maps Generated from Driving Trajectories Eriko Toma, Katsuyuki Kamei, Masami Takata Advanced Technology R&D Center, Mitsubishi Electric Co., Amagasaki, Hyogo, Japan 11:00 - 11:20am: Correction Method for Text Errors in Early-Modern Japanese Books Using BERT Hiyori Kanetaka, Miho Chiyonobu, Yuki Takemoto, Yu Ishikawa, and Masami Takata Nara Women's University, Nara, Japan 11:20 - 11:40am: Efficient Implementation of the QR Algorithm for Complex Matrices Miho Chiyonobu, Masami Takata, Kinji Kimura, and Yoshimasa Nakamura Shiga University, Shiga, Japan 11:40 - 12:00pm: GraphBioisostere: General Bioisostere Prediction Model with Deep Graph Neural Network Sho Masunaga, Kairi Furui, Apakorn Kengkanna, Masahito Ohue Institute of Science Tokyo, Kanagawa, Japan GBDT-based Model and Web Tool for Prediction of Blood-Placental 12:00 - 12:20pm: Barrier Permeability of Small Molecules Masahito Ohue, Kairi Furui School of Computing, Institute of Science Tokyo, Kanagawa, Japan 12:20 - 01:00pm: LUNCH (On Your Own)

SESSION 2-MON (PDPTA TRACK): (CONCURRENT SESSION WITH ONLINE SESSIONS) SCOPE: INTERNATIONAL WORKSHOP ON MATHEMATICAL MODELING AND PROBLEM SOLVING (MPS) Co-Chairs: Prof. Miho Chiyonobu (Shiga University, Japan); Prof. Masahito Ohue (Institute of Science Tokyo, Japan); Prof. Nobuaki Yasuo (Institute of Science Tokyo, Japan); Prof. Masami Takata (Nara Women's University, Japan) July 21, 2025 (Monday); 01:00pm - 03:00pm (LOCATION: Ballrooms Galleria D & E) 01:00 - 01:20pm: Visualizing Phishing Email Features Through Sentiment Analysis Takeshi Matsuda, Michio Sonoda Department of Information Science, Hannan University, Japan Hardware/Software Co-Design for a Multi-Core Post-Quantum 01:20 - 01:40pm: Cryptography CRYSTALS-Kyber Accelerator Kien Tran-Hoang, Hironori Nakajo Tokyo University of Agriculture and Technology, Tokyo, Japan 01:40 - 02:00pm: SESCA: An Enhanced Sine-Cosine Algorithm with Sigmoid-based Nonlinear Mapping for Optimization Yang Cao, Xingbang Du, Rui Zhong, Jun Yu, Masaharu Munetomo Hokkaido University, Sapporo, Japan Incorporating Angular Information into GNNs for Protein-Protein 02:00 - 02:20pm: Interaction Re-ranking Yukinobu Matsuno, Nobuaki Yasuo, Masakazu Sekijima School of Computing, Department of Computer Science, Institute of Science Tokyo, Japan 02:20 - 02:40pm: Growth Monitoring of Mini Tomatoes Using Color Analysis and Cumulative Temperature to Predict Maturity Degree Yan Lyu, Kyuki Shibuya, Yoshiki Gama, Yoshiki Hatanaka, Warut Timprae, Poltak Sandro Rumahorbo, Shinya Yamanaka, and Shinya Watanabe Muroran Institute of Technology, Muroran, Hokkaido, Japan 02:40 - 03:00pm: MPIcam: A Deep Learning Based Real-Time Medicinal Plant Identification System for Rural Healthcare in Bangladesh Shabnur Anonna Akhy, Hayaru Shouno, Mayen Uddin Mojumdar, Tahir Hussain, Md Bilayet Hossain, Shah Md Tanvir Siddiquee, and Narayan Ranjan Chakraborty

The University of Electro-Communications (UEC), Tokyo, Japan

03:00 - 03:40pm: BREAK (Refreshments) & POSTERS July 21, 2025 (Monday)

(LOCATION: Ballrooms Galleria B & C)

- O. Segment-Based Protection Techniques in Segment Routing An-Che Cheng, Yen-Wen Chen National Central University, Taoyuan City, Taiwan (R.O.C.)
- O. Bandwidth Slicing Analysis under Abnormal Traffic using a Digital Twin Framework Tai-An Wu National Central University, Taoyuan City, Taiwan (R.O.C.)
- O. A Base Station Energy Saving Strategy Integrating
 Multi-Agent Reinforcement Learning and Load Balancing
 Chia-Jui Wu
 National Central University, Taoyuan City, Taiwan (R.O.C.)
- O. OTDOA-based Positioning Approach for Indoor Factory (InF)
 Settings Using 5G New Radio
 Imran Ashraf, Soojung Hur, Yongwan Park
 Department of Information and Communication Engineering,
 Yeungnam University, Gyeongsan-si, Republic of Korea
- O. Design of an Automated Pet Nourishment System and Embedded Microcontroller
 Bassam Shaer, Noah Bradshaw, Alyssa McLaughlin
 ECE and ME Engineering Department, University of West
 Florida, Fort Walton Beach, Florida, USA
- O. Smart Home-Based AI Medicine Recognition System for Elderly Care Ssu-Hsuan Lu, Che-Kuang Lin, Yi-Zhan Li Department of Computer Information and Network Engineering, Lunghwa University of Science and Technology, Taiwan; Division of Neurosurgery, Department of Surgery, Far Eastern Memorial Hospital, Taiwan
- O. Agentic AI Guidance Using Simon's Framework for Management Science David B. Keever Leidos Corporation, Reston, Virginia, USA
- O. Hybrid Model Between Blockchain and Merkle Tree for the Protection of Personal Data Maria Alejandra Angarita, Gabriel Alejandro Maldonado, Leonardo Juan Ramirez Lopez Osiris & Bioaxis Research Group, Universidad El Bosque, Bogota, Colombia

SESSION 3-MON (PDPTA, CSC, FCS, AI TRACKS): (CONCURRENT SESSION WITH ONLINE SESSIONS) SCOPE: HPC + SCIENTIFIC COMPUTING + CS FOUNDATION + AI Co-Chairs: Prof. Ahmed Tarek Professor of Computer Science, Montgomery College, State of Maryland, USA July 21, 2025 (Monday); 03:40pm - 05:40pm (LOCATION: Ballrooms Galleria D & E) 03:40 - 04:00pm: A Material Interface-aware Method for Diffusion Equation William W. Dai Los Alamos National Laboratory, USA Accelerating TVM LLM Inference via Paged KV-Cache and 04:00 - 04:20pm: Customized Kernels on RVV Shou Chen Chiu, Chun Lin Huang, Meng Shiun Yu, Ming Zhang Huang, Jenq Kuen Lee Department of Computer Science, National Tsing Hua University, Hsinchu, Taiwan, ROC Design and Analysis of Recursive Algorithms - A Modern 04:20 - 04:40pm: Perspective Ahmed Tarek, Ahmed Alveed, Ahmed Farhan Engineering, Physical Computer Sciences (EPCS) Department, SET Division, Montgomery College (MC), Rockville, Maryland, USA; The Wharton School, University of Pennsylvania, Philadelphia, Pennsylvania, USA; Yale New Haven Hospital, Yale University, Connecticut, USA 04:40 - 05:00pm: Evaluating Large Language Models for Explaining Insecure Code and Identifying Vulnerabilities in Java and Python Adiba Mahmud, Yasmeen Rawajfih, Fan Wu Department of Computer Science, Tuskegee University, Tuskegee, Alabama, USA 05:00 - 05:20pm: High Performance Algorithms for Network Routing using In-Memory Computing Ouoc-Nam Tran Southeastern Louisiana University, Louisiana, USA 05:20 - 05:40pm: Improving Retail Sales Forecast Accuracy Using XGBoost: A Machine Learning Approach Biyasu A, Mao Zheng Department of Computer Science & Computer Engineering, University of Wisconsin-LaCrosse, LaCrosse, Wisconsin, USA 05:40 - 06:00pm: FREE SLOT 07:00 - 09:00pm: CONFERENCE RECEPTION DINNER / SOCIAL July 21 - Monday; 07:00pm

(LOCATION: Velvet Room)

ONLINE / ZOOM SESSIONS

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

SESSION 1-ZOOM: ---> ICAI, HIMS TRACKS

SCOPE: ARTIFICIAL INTELLIGENCE + APPLICATIONS

Chairs: TBA

July 21, 2025 (Monday); 08:00am - 09:20am

(ON-LINE / ZOOM)

08:00 - 08:20am: Machine Learning-Based Crop Yield Prediction: State-of-the-Art,

Challenges, and Future Directions

Topside E. Mathonsi

Department of Information Technology, Tshwane University of

Technology, Pretoria, South Africa

08:20 - 08:40am: MRI-based Deep Learning for Brain Tumour Prediction

Araek Tashkandi, Siraj Wally

College of Computer Science and Engineering, Department of Information System and Technology, University of Jeddah,

Jeddah, Saudi Arabia;

College of Medicine, Internal Medicine Department - Radiology,

University of Tabuk, Tabuk, Saudi Arabia

08:40 - 09:00am: The Impact of Generative AI (ChatGPT) on Constructivist

Learning Outcomes in Higher Education: A Mixed-Methods Study

Noura Alhazzani

Computer Science & Education, King Saud University, Saudi Arabia

09:00 - 09:20am: Early Detection of Poultry Infectious Disease Using

Deep Learning

Araek Tashkandi, Siraj Wally

College of Computer Science and Engineering, Department of Information System and Technology, University of Jeddah,

Jeddah, Saudi Arabia;

College of Medicine, Internal Medicine Department - Radiology,

University of Tabuk, Tabuk, Saudi Arabia

SESSION 2-ZOOM: ---> SERP, CSC, FCS STRACKS

SCOPE: SOFTWARE ENGINEERING, SCIENTIFIC COMPUTING, FOUNDATION

Chairs: TBA

July 21, 2025 (Monday); 09:20am - 11:00am

(ON-LINE / ZOOM)

09:20 - 09:40am: A Non-Functional Quality Framework for Blockchain Software:

ISO/IEC 25010 Revisited

Abeer S. Al-Humaimeedy, Salma Habiballah, Reema Alhamadi Software Engineering Department, King Saud University,

Riyadh, Saudi Arabia

09:40 - 10:00am: Machine Learning and Data Analysis Method for Predicting an

Efficient Algorithm for Heterogeneous Multicore Scheduling

Imad Assayakh, Imed Kacem, Giorgio Lucarelli LCOMS, Universite de Lorraine, Metz, France

10:00 - 10:20am: Language Foundations for HPC Array Structures

Gaetan Hains, John Mullins, Lenore Mullin

LACL, Universite Paris-Est Creteil (UPEC), France; Ecole Polytechnique de Montreal, Montreal, Canada; University at Albany (SUNY), Albany, New York, USA

10:20 - 10:40am: Formulation of Voltage Stability Second Order Governing

Equation and Arithmetic Moving Average for Transmission

Line Prediction and Improvement

Braide S. Lucky, Horsfall Dan, EIGBE, Albert Ehimhen Department of Electrical and Electronic Engineering,

Rivers State University, Nkpolu-Oroworukwo, Port Harcourt,

Nigeria

10:40 - 11:00am: Voltage Collapse Instability Prediction of Nigerian 330kV

Transmission Network Using Predictive Optimizer and Arithmetic Moving Average Technique for Enhancement

Braide S. Lucky, Lawrence E. Ekeng, EIGBE, Albert Ehimhen

Department of Electrical and Electronic Engineering,

Rivers State University, Nkpolu-Oroworukwo, Port Harcourt,

Nigeria

SESSION 3-ZOOM: ---> IPCV, ACC, BIOCOMP, CSC TRACKS

SCOPE: COGNITIVE COMPUTING, COMPUTATIONAL BIOLOGY, QUANTUM AI,

IMAGING SCIENCE

Chairs: TBA

July 21, 2025 (Monday); 11:00am - 12:40pm

(ON-LINE / ZOOM)

11:00 - 11:20am: An Overview of Real-Time Computer Vision-Based Traffic

Analysis Systems

Alberto Sillitti, Suwilanji Silwamba

Centre for Applied Software Engineering, Italy;

Innopolis University, Russian Federation

11:20 - 11:40am: TruCrisisAware: Integrating Naturalistic Decision Making

into AI for Enhanced Disaster Response

Chen-Yeou Yu, Jiaxuan He, Kamsi Amaeshi, Wensheng Zhang Department of Computer and Data Science, Truman State

University, Kirksville, MO, USA;

Department of Computer Science, Iowa State University,

Ames, Iowa, USA

11:40a - 12:00p: Risk Factors for the Development of Early Onset Cancers

Andrew Stevens, Jing Chen, Michael Behring, Katia Maxwell Department of Computer Science, Athens State University,

Athens, Alabama, USA;

Department of Behavioral Science, Athens State University,

Athens, Alabama, USA

12:00 - 12:20pm: Neural Network Benchmarking on ECG Classification

Nelson del Castillo Collazo, Adalberto Joel Duran Ortega,

and Demetrio Fabian Garcia Nocetti

Instituto de Investigaciones en Matematicas Aplicadas y en Sistemas, Universidad Nacional Autonoma de Mexico, Mexico

12:20 - 12:40pm: Quantum-Enhanced Intrusion Detection: A Novel Hybrid Approach

Using Quantum Deep Learning

Gift Aruchi Nwatuzie, Hassan Peyravi

Department of Computer Science, Kent State University,

Kent, Ohio, USA

SESSION 4-ZOOM: ---> ICAI TRACKS

SCOPE: ARTIFICIAL INTELLIGENCE AND APPLICATIONS

Chairs: TBA

July 21, 2025 (Monday); 12:40 - 02:20pm

(ON-LINE / ZOOM)

12:40 - 01:00pm: Baylor Environmental AI Research System (BEARS): An Agentic

AI Project to Combat Climate Change

Abanisenioluwa Orojo, Bikram Khanal, Emmanuelli El-Mahmoud,

Joseph Yu, Maisha Binte Rashid, Paapa Quansah, Sri Manjusha Tella, Tianqi (Kirk) Ding, Xiang Fang,

Pablo Rivas, Maryam Samami

Department of Computer Science, Baylor University, Waco,

Texas, USA;

Department of Electrical and Computer Engineering,

Baylor University, Waco, Texas, USA

01:00 - 01:20pm: Missile Command Reimagined: Formulation of a Reinforcement

Learning Based Approach for Resource-Constrained Defense

Rishan Patel, Haley Dozier, Ian Dettwiller

US Army Engineer Research and Development Center,

Vicksburg, Mississippi, USA

01:20 - 01:40pm: MoIST: Mixture of Intellectuals via Student-Teachers

Amy Dong, Nicholas Yang, Henry Huang, Samuel Goldston,

and Kiante Brantley

Harvard University, Cambridge, Massachusetts, USA

01:40 - 02:00pm: An EEG Based High Accuracy CNN for Emotional Health Detection

Gunjan Jha, Anshul Jha, Eugene John

Department of Electrical and Computer Engineering,

University of Texas at San Antonio, San Antonio, Texas, USA

02:00 - 02:20pm: Exploring Spam Classification with Open-Source Language

Models and Real-World Gmail Data Anahita Dinesh, Robert Chun

San Jose State University, San Jose, California, USA

SESSION 5-ZOOM: ---> CSC TRACK

SCOPE: MILITARY AND DEFENSE MODELING AND SIMULATION

ORGANIZED BY:

Douglas D. Hodson (Chair)

Professor, Computer Science and Engineering Department,

the US Air Force Institute of Technology, USA;

+

Michael R. Grimaila (Co-Chair)

Professor & Head, Systems Engineering and Management

Department, the US Air Force Institute of

Technology, USA;

+

Torrey J. Wagner (Co-Chair)

Assistant Professor of Data Analytics supporting the AFIT/EN Data Analytics graduate certificate program, USA

Chairs: TBA

July 21, 2025 (Monday); 02:20pm - 03:20pm

(ON-LINE / ZOOM)

02:20 - 02:40pm: Classifying Seismic Events: A Machine Learning Approach to

Identifying Earthquakes, Explosions and Other Rare Events Christopher R. Weed, Torrey Wagner, Brent Langhals, and

Paul Auclair

Data Analytics Certificate Program, Air Force Institute of

Technology, Wright-Patterson AFB, Ohio, USA; KBR Inc., Wright-Patterson AFB, Ohio, USA

02:40 - 03:00pm: Airfoil Selection Tool Development Using the Cross-Industry

Standard Process for Data Mining

Mitchell Scott, Paul Auclair, Torrey Wagner, Brent Langhals

Data Analytics Certificate Program, Graduate School of

Engineering and Management, Air Force Institute of Technology,

Wright-Patterson AFB, Ohio, USA;

Data Analytics Certificate Program, KBR Inc.,

Wright-Patterson AFB, Ohio, USA

03:00 - 03:20pm: MADFACTs:A Meta-learning Augmented Defense Framework for

Adversarial Cyber Techniques

Marc Chale, Bruce Cox, Nathaniel Bastian, Jeffery Weir Air Force Institute of Technology, Department of Operational

Sciences, Wright-Patterson Air Force Base, Ohio, USA;

Army Cyber Institute, USA

SESSION 6-ZOOM: ---> IPCV, ICDATA, ICOMP, SAM TRACKS SCOPE: IMAGING SCIENCE, DATA SCIENCE, SDN, SECURITY Chairs: TBA July 21, 2025 (Monday); 03:20pm - 05:00pm (ON-LINE / ZOOM) An Empirical Study on Underwater Image Enhancement for 03:20 - 03:40pm: Robust Instance Segmentation Lujun Zhai, Clivano J. Rolle, Suxia Cui Prairie View A&M University, Prairie View, Texas, USA SELENE: A Deep Learning Model for Predicting Lunar Absorbed 03:40 - 04:00pm: Radiation Dose Rates Sai Srikar Tummala, Mittansh Bhatia, Robert Chun Computer Science Department, San Jose State University, California, USA 04:00 - 04:20pm: A Framework for Improving Network Topology Based on Graph Theory in Software-Defined Networking Datta Sai Krishna Naidu, Alex Modarresi California State University, Northridge, California, USA 04:20 - 04:40pm: Experimental Evaluation of Security Attacks on Self-Driving Car Platforms Abhishek Vishwakarma, Purva Vijayvargiya, Nathan Lee, and Mohammad Husain Computer Science, Cal Poly Pomona, Pomona, California, USA 04:40 - 05:00pm: CryptoKeys: Another Keyboard-Centric Approach to End-to-End Encryption Kanwaljit Ahluwalia, Mikhail Gofman, David Medina Dominguez Computer Science Department, California State University,

Fullerton, California, USA

SESSION 7-ZOOM: ---> ICAI, EEE, HIMS TRACKS

SCOPE: ARTIFICIAL INTELLIGENCE, LLM, HEALTH INFORMATICS

Chairs: TBA

July 21, 2025 (Monday); 05:00 - 06:20pm

(ON-LINE / ZOOM)

05:00 - 05:20pm: Leveraging Transformer Models for Extractive Question Answering

in Criminal Report Analysis

Lenin G. Falconi, Lorena Isabel Barona-Lopez, and

Myriam Hernandez-Alvarez

Escuela Politecnica Nacional, Quito, Ecuador

05:20 - 05:40pm: An Exploratory Case Study of the Implications of ChatGPT as a

Tool in the Classroom Anastasia Biggs, Dana Betts

Colorado Technical University, Colorado, USA

05:40 - 06:00pm: Enhancing Language Assessment in Traumatic Brain Injury: A

Situational Approach to Data Precision and Stability Detection

Marisol Roldan-Palacios, Aurelio Lopez-Lopez

Instituto Nacional de Astrofisica Optica y Electronica (INAOE),

Mexico

06:00 - 06:20pm: Correlating Daily Activities and Life Satisfaction to Promote

Health Behaviors of Older Adults in the Community

Susumu Shibusawa, Toshiya Watanabe

Ibaraki University, Japan

<----- LOCATION: Ballrooms Galleria D & E ------> 08:20 - 09:20am: PANEL DISCUSSION: ARTIFICIAL INTELLIGENCE: PROS, CONS, AND IMPLICATIONS **PANELISTS:** - Prof. Leonidas Deligiannidis Wentworth Institute of Technology, Boston, MA, USA - Dr. Salem Othman Wentworth Institute of Technology, Boston, MA, USA - Dr. John N. Carbone Senior Technical Director, Adjunct Professor Everfox LLC, Baylor University, Texas, USA - Prof. Hamid R. Arabnia (MODERATOR) Professor Emeritus, Computer Science The University of Georgia, Georgia, USA (LOCATION: Galleria D & E) SESSION 4-TUE (ICAI + ICEQT TRACKS): (CONCURRENT SESSION WITH ONLINE SESSIONS) SCOPE: AI + QUANTUM COMPUTING + ALGORITHMS Co-Chairs: Himesh Singh Chauhan Rajiv Gandhi Proudyogiki Vishwavidyalaya July 22, 2025 (Tuesday); 09:20am - 10:00am (LOCATION: Ballrooms Galleria D & E) 09:20 - 09:40am: SPAR: Scalable Prioritized Agent Routing for Multi-Agent Networks Salem Othman Wentworth Institute of Technology, Boston, Massachusetts, USA 09:40 - 10:00am: A Practical Tutorial on Implementing Shor's Algorithm Leonidas Deligiannidis Wentworth Institute of Technology, Boston, Massachusetts, USA 10:00 - 10:20am: BREAK (Refreshments) (LOCATION: Galleria B & C)

SESSION 5-TUE (CSC, ICOMP, IKE, ICAI TRACKS): (CONCURRENT SESSION WITH ONLINE SESSIONS) SCOPE: SCIENTIFIC COMPUT. + AI + IOT + KNOWLEDGE ENGINEERING + Data Science Co-Chairs: TBA July 22, 2025 (Tuesday); 10:20am - 12:20pm (LOCATION: Ballrooms Galleria D & E) 10:20 - 10:40am: Example of Non-Linear Map with Non-Unique Transition to Dynamic Chaos Peter Chtcheprov, Andrei Chtcheprov University of North Carolina, Chapel Hill, North Carolina, USA; Independent Researcher, Chapel Hill, North Carolina, USA 10:40 - 11:00am: Representation of Multidimensional Chaotic Models with Closed-Form Invariant Distributions as Compositions of Symmetric Functions Peter Chtcheprov, Andrei Chtcheprov University of North Carolina, Chapel Hill, North Carolina, USA; Independent Researcher, Chapel Hill, North Carolina, USA Deep Reinforcement Learning for Resource Management in 11:00 - 11:20am: 5G-Enabled IoT Networks: A Comprehensive Survey Rahma Shahid, Logan Sherlock, Sagnika Ghosh, Kanwalinderjit Kaur, and Renu Balyan State University of New York at Old Westbury, New York, USA; Tennessee State University, Nashville, Tennessee, USA; California State University Bakersfield, California, USA 11:20 - 11:40am: Data-Driven Transformation: The Role of Analytics and Visualization Champions in Organizational Digital Maturity Deepshikha Shekhawat, Himesh Chauhan Business Intelligence Program Manager, India; University of Texas at Dallas, Texas, USA 11:40 - 12:00pm: Designing Multi-Objective CNN Architectures for SQL Query Modeling with Evolution Strategies Pablo Rivas, Donald R. Schwartz Department of Computer Science, Baylor University, Waco, Texas, USA; Department of Computing Technology, Marist University, Poughkeepsie, New York, USA 12:00 - 12:20pm: Interpretable, Adaptive, and Robust Online Machine Learning for Data Streams - An Overview and Update Zhong Chen School of Computing, Southern Illinois University, Carbondale, Illinois, USA

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

SESSION 6-TUE (IPCV, IKE, ICWS TRACKS):

(CONCURRENT SESSION WITH ONLINE SESSIONS)

SCOPE: IMAGING SCIENCE + KNOWLEDGE ENGINEERING +
COMMUNICATION SYSTEMS + COMPUTATIONAL BIOLOGY

Co-Chairs: Deepshikha Shekhawat

Business Intelligence PM | AMD, USA

July 22, 2025 (Tuesday); 01:00pm - 02:00pm

(LOCATION: Ballrooms Galleria D & E)

01:00 - 01:20pm: Measuring Light Attenuation via Paper Materials Using Image

Processing, and an Application Concept

Unal McLauchlan, Mehrube Mehrubeoglu, Lifford McLauchlan W.B. Ray, and Del Mar College, Corpus Christi, Texas, USA; Department of Engineering, Texas A&M University-Corpus Christi,

Corpus Christi, Texas, USA;

Department of Electrical Engineering and Computer Science, Texas A&M University-Kingsville, Kingsville, Texas, USA

01:20 - 01:40pm: LOD (Level Of Detail) Based Optimized Privacy-Preserving

Navigation Hyun-A Park

Department of Computer Engineering, Honam University,

Gwangsan-gu, GwangJu, South Korea

01:40 - 02:00pm: Designing a Biorobotic Wireless Sensor Paradigm for Soil and

Crop Monitoring Deok Hee Nam

Engineering and Computer Science, Wilberforce University,

Wilberforce, Ohio, USA

SESSION 7-TUE (BIOCOMP TRACK):

(CONCURRENT SESSION WITH ONLINE SESSIONS)

SCOPE: COMPUTATIONAL BIOLOGY

Co-Chairs: TBA

July 22, 2025 (Tuesday); 02:00pm - 03:00pm

(LOCATION: Ballrooms Galleria D & E)

02:00 - 02:20pm: Simulation Study of Optical Phase Conjugation Light Refocusing

with Constant Amplitude Information Sheng-Chun Yao, Jake W. Liu, Snow H. Tseng

Graduate Institute of Photonics and Optoelectronics,

National Taiwan University, Taipei, Taiwan

02:20 - 02:40pm: Integrating Pharmacokinetics and Pharmacodynamics Modeling with

Quantum Regression for Predicting Herbal Compound Toxicity

Don Roosan, Saif Nirzhor, Rubayat Khan

School of Engineering and Computational Sciences, Merrimack College, North Andover, Massachusetts, USA; University of Texas Southwestern Medical Center, Dallas,

Texas, USA;

University of Nebraska Medical Center, Omaha, Nebraska, USA

02:40 - 03:00pm: Robust Unsupervised Classification of Drosophila Cell Dynamics

Using DTW and Feature-Based Cluster Consensus

Tim Rogalsky, Lia Campbell-Enns, Matthaeus Dyck, and

Nicolas Malagon

Canadian Mennonite University, Winnipeg, MB, Canada

03:00 - 03:40pm: BREAK (Refreshments) & POSTERS
July 22, 2025 (Tuesday)
(LOCATION: Galleria B & C)

- O. Text Mining Analysis for Traditional Dance Songs
 Toshiyuki Maeda, Masumi Yajima, Akiyoshi Wakatani
 Department of Management Information,
 Hannan University, Japan;
 Department of Economics, Meikai University, Japan;
 Faculty of Intelligence and Informatics,
 Konan University, Japan
- O. Energy Consumption of TinyML-based Intrusion Detection System for Nano-Sized UAVs Nazli Tekin Erciyes University, Kayseri, Turkey
- O. Evaluating the Impact of Algorithmic Complexity on Recommender Systems: A Comparative Study of Rating and Ranking Models
 Rodriguez-Lopez P., Perez-Nunez P., Gonzalez P., Luna M. Escuela Politecnica de Ingenieria Gijon,
 Campus de Viesques s/n, Gijon, Asturias, Spain
- O. Digital Twins in Supply Chain Management: An Overview of the Literature Gonzalez-Vecino A., Pino R., Ponte B., Leon O., and de la Fuente D. Escuela Politecnica de Ingenieria Gijon, Campus de Viesques s/n, Gijon, Asturias, Spain
- O. Analyzing Stock Market Recovery for G20 Countries in Critical Events using Elastic Patterns
 A. Lorenzo, R. Rodriguez-Cardos, J. A. Olivas
 Department of Business Intelligence,
 Castilla-La Mancha Government, Spain
- O. Depth Perception Control Using Camera Focus Control and Foveated Rendering in the Visual System of an Avatar Robot Masaki Ohya, Asuka Nakamura, Hiroyuki Nakano, and Hideo Furuhashi Department of Electrical and Electronics Engineering, Aichi Institute of Technology, Toyota, Japan
- O. Feature Engineering for Classical and Quantum Unsupervised Machine Learning in Short Time Series of Bird Strike Incidents Mohammed Syed, Mark Slagle, Paul Garcia The Boeing Company, USA

SESSION 8-TUE (SAM, IPCV, HIMS TRACK):

(CONCURRENT SESSION WITH ONLINE SESSIONS)

SCOPE: SECURITY AND MANAGEMENT + IMAGING SCIENCE + HEALTH

INFORMATICS

Co-Chairs: Himesh Singh Chauhan

Rajiv Gandhi Proudyogiki Vishwavidyalaya

July 22, 2025 (Tuesday); 03:40pm - 05:40pm

(LOCATION: Ballrooms Galleria D & E)

03:40 - 04:00pm: Multi-Party Computation for IoT Environments: Evaluating

Information Checking Protocol-Based Verifiable Secret

Sharing Under Resource Constraints Jaishnoor Kaur, Levent Ertaul

California State University East Bay (CSUEB), California, USA

04:00 - 04:20pm: Harnessing Machine Learning and Artificial Intelligence in

Cyber Security: A Deep Dive into Threat Detection, Anomaly Detection, Intrusion Detection, and Malware Analysis David Dorsaima, Lisa Kovalchick, Weifeng Chen

Pennsylvania Western University, Pennsylvania, USA

04:20 - 04:40pm: Uncovering Crime Patterns: A Geospatial Clustering Approach

Elvira Rolon, Jose G. Mendez, Juan Pablo Soto, Roberto Pichardo Facultad de Ingenieria Tampico, Universidad Autonoma de Tamaulipas

Facultad Interdisciplinaria de Ciencias Exactas y Naturales,

Universidad de Sonora, Mexico

04:40 - 05:00pm: Formal Security Verification of Messaging Layer Security

Protocol Using ProVerif

Takehiko Mieno, Hiroyuki Okazaki, Kenichi Arai, Yuichi Futa

Graduate School of Medicine, Science and Technology,

Shinshu University, EPSON AVASYS CORPORATION, Shimonogo Otsu,

Ueda City, Nagano, Japan;

Graduate School of Science & Tech., Shinshu University, Japan;

Graduate School of Integrated Science and Technology,

Nagasaki University, Japan;

School of CS, Tokyo University of Technology, Japan

05:00 - 05:20pm: Blockchain-Based Health System Development: Challenges,

Architecture, and Trends

Given Mark Garcia, Jasper Liu, Carol Yan, Eduardo Colmenares-Diaz, Irvin Velazco, Heng Wu

Software Development, Google Developer Group, La Verne,

California, USA;

Software Development, Google Developer Group, Fremont,

California, USA;

Diamond Bar High School, Diamond Bar, California, USA;
Department of Computer Science, Midwestern State University,

Wichita Falls, Texas, USA;

CS and CE Department, University of La Verne, California, USA

05:20 - 05:40pm: Random Forest-Based Classification of Critical ECG Rhythms

for the Detection of Life-Threatening Cardiac Events Herson Armando Martinez Partida, Daniela M. Martinez, Irma Uriarte Ramirez, Norma Alicia Barboza Tello, and

Paul Medina Castro

Universidad Autonoma, de Baja California, Mexico

05:40 - 06:00pm: FREE SLOT

ONLINE / ZOOM SESSIONS

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

SESSION 8-ZOOM: ---> FECS, ICAI TRACKS

SCOPE: ARTIFICIAL INTELLIGENCE, APPLICATIONS + EDUCATION

Chairs: TBA

July 22, 2025 (Tuesday); 08:00am - 09:40am

(ON-LINE / ZOOM)

08:00 - 08:20am: AI Catalysing and Reformulating Innovation-Driven Education

in ICT Engineering

Jouni Isoaho, Hannu Tenhunen, Imed Ben Dhaou

University of Turku, Turku, Finland;

KTH-Royal Institute of Technology, Stockholm, Sweden;

Dar Al-Hekma University, Jeddah, Saudi Arabia

08:20 - 08:40am: Datasets for Hash-based Homomorphic AI with Variable

Compression Rate Jaagup Sepp

Hope4Sec Crypto Lab, Tallinn, Estonia

08:40 - 09:00am: Modular AI-Powered Interviewer with Dynamic Question

Generation and Expertise Profiling

Aisvarya Adeseye, Jouni Isoaho, Seppo Virtanen, Mohammad Tahir Department of Computing, University of Turku, Turku, Finland

09:00 - 09:20am: A Prompt-Based Framework for Loop Vulnerability Detection

Using Local LLMs

Adeyemi Adeseye, Aisvarya Adeseye

Brilloconnetz Partners avoin yhtio, Turku, Finland;

Department of Computing, University of Turku, Turku, Finland

09:20 - 09:40am: Local Language Models for Context-Aware Adaptive Anonymization

of Sensitive Text

Aisvarya Adeseye, Jouni Isoaho, Seppo Virtanen, Mohammad Tahir Department of Computing, University of Turku, Turku, Finland

SESSION 9-ZOOM: ---> ICEQT, BIOCOMP, CSC, ESCS, GCC TRACKS

SCOPE: QUANTUM COMPUTING + COMPUTATIONAL BIOLOGY + SDN +

SCIENTIFIC COMPUTING

Chairs: TBA

July 22, 2025 (Tuesday); 09:40am - 11:20am

(ON-LINE / ZOOM)

09:40 - 10:00am: Quantum Vehicular Ecosystem: Analysis of Emerging Applications

and Security Implications

Akwasi Adu-Kyere, Ethiopia Nigussie, Jouni Isoaho

Department of Computing, University of Turku, Turku, Finland

10:00 - 10:20am: A Neural Network Approach for Predicting Cancer-Linked

Transcriptional Activity from Epigenetic Signature

Riyan Jain, Anel Turgambayeva

Illinois Mathematics & Science Academy, Aurora, Illinois, USA;

Department of Biological Sciences, Brock University,

St. Catharines, ON, Canada

10:20 - 10:40am: A Hybrid Statistical-Machine Learning Framework for Assessing

Structural Accuracy in Predicted Protein Models

Niharika Pandala, Katherine G. Brown, Homayoun Valafar University of Texas at Dallas, Richardson, Texas, USA; University of South Carolina, Columbia, South Carolina, USA

10:40 - 11:00am: Cognitive Software Defined Radios for Embedded Systems and

7G Mesh Applications

Jeffrey Wallace, Miroslav Vukovic, Toni Karimovic,

and William Edwards

Rocket Technology Systems, LLC, Washington, DC, USA

11:00 - 11:20am: On Simulation of Multiple-Row Generalized Pipeline

Cellular Array

Ihfaz Islam, Harpreet Singh, Lubna Alazzawi, Kaveh Abani,

Bhupinder Mavi, Gurveer Singh Kalsi Electrical and Computer Engineering,

Wayne State University, USA

SESSION 10-ZOOM: ---> ICDATA, SAM, SERP, ESCS, FECS TRACKS

SCOPE: DATA SCIENCE, SECURITY, AI, SOFTWARE ENGINEERING

Chairs: TBA

July 22, 2025 (Tuesday); 11:20am - 01:00pm

(ON-LINE / ZOOM)

11:20 - 11:40am: Semantic Risk Scoring of Aggregated Metrics: An AI-Driven

Approach for Healthcare Data Governance

Mohammed Omer Shakeel Ahmed

University of Texas at Arlington, Texas, USA

11:40a - 12:00p: Bridging the Gap to Enhance Critical Infrastructure Security

through Data Analytics and Public-Private Partnerships Edwin Figueroa Perez, Isaac Osunmakinde, Cheryl Hinds Computer Science Department, Norfolk State University,

Norfolk, Virginia, USA

12:00 - 12:20pm: Automation Innovation - AI's Impact on Software Development

Lifecycle

Max Dombrowski, Katia Maxwell

Athens State University, Athens, Alabama, USA

12:20 - 12:40pm: TruRescue: A Federated Learning Based Drone Driven Road

Emergency Assistant with Generative AI Jiaxuan He, Olivia Lewis, Chen-Yeou Yu Department of Computer and Data Science, Truman State University, Kirksville, MO, USA

12:40 - 01:00pm: Integrating Edge AI and Embedded Systems into Computer

Architecture with Raspberry Pi

Julie Krebs, Anna Quach, Costa Gerousis School of Engineering and Computing,

Christopher Newport University, Newport News, Virginia, USA

SESSION 11-ZOOM: ---> FECS, HIMS, MSV TRACKS

SCOPE: PROGRAMMING LANGUAGES, HEALTH INFORMATICS, SIMULATION

Chairs: TBA

July 22, 2025 (Tuesday); 01:00pm - 02:40pm

(ON-LINE / ZOOM)

01:00 - 01:20pm: A Spotlight on the Role of Functional Programming & Haskell

in Computing & Software Development

Mathias M. Fonkam, Narasimha Rao Vajjhala

College of IST, Penn State University, State College, PA, USA;

Department of Computer Science,

American University in Bulgaria, Bulgaria

01:20 - 01:40pm: Using Mobile Technology to Assist in Classification of

Potential carpal Tunnel Syndrome Patients

Wei Zhang, Feng Gu, Ali Mohamed

The City University of New York, College of Staten Island,

Staten Island, New York, USA

01:40 - 02:00pm: Negative Effects of Alcohol: Software for Educating the

Public while Determining Public Awareness

M. S. Gupta, L. C. Gupta, A. Gupta, A. M. G. Solo Maverick Trailblazers Inc., Wilmington, Delaware, USA

02:00 - 02:20pm: Estimating Fall Risk in Older Adults Using Postural Sway

Parameters and Machine Learning

Haoxuan Zhang, Ting Xiao, Guna Sindhuja Siripurapu, Shawn Kennedy, Rita M. Patterson, Mark V. Albert

University of North Texas, Texas, USA;

University of North Texas Health Science Center at

Fort Worth, Texas, USA

02:20 - 02:40pm: A Framework for Simulating Resilient Cloud-Edge AI Tasking

for Geospatial Operations in Contested Environments
Haley Dozier, Raimundo Dossantos, Victoria D. Moore
US Army Engineer Research and Development Center (ERDC),
The Armytican Tachaelagy Laboratory Vieleburg Mississippi

Information Technology Laboratory, Vicksburg, Mississippi, USA

SESSION 12-ZOOM: ---> ICDATA, IPCV, IKE, ICEQT TRACKS

SCOPE: DATA SCIENCE, IMAGING SCIENCE, KNOWLEDGE ENGINEERING,

APPLICATIONS

Chairs: TBA

July 22, 2025 (Tuesday); 02:40pm - 04:00pm

(ON-LINE / ZOOM)

02:40 - 03:00pm: Multi-Dimensional Summarization Agents with Context-Aware

Reasoning over Enterprise Tables

Amit Dhanda Amazon, USA

03:00 - 03:20pm: Evaluating Open-Source Pretrained Models for Natural

Disaster Response

Thomas Sigler, Haley Dozier, George Gallarno

Information Technology Laboratory, Engineer Research and

Development Center, Vicksburg, Mississippi, USA

03:20 - 03:40pm: Visualizing Human Trafficking and Criminal Networks: A

Systematic Mapping Study

Mia Gortney, Garret Parker, Patrick Harris, Austin Huizinga,

Alejandro Rodriguez Perez, Ernesto Quevedo Caballero, Kor Sooksatra, Tomas Cerny, Pablo Rivas, Bikram Khanal,

Maisha Binte Rashid, Jie Ren

School of Engineering and Computer Science, Department of Computer Science, Baylor University, Waco, Texas, USA;

College of Engineering, Department of Systems and Industrial Engineering, University of Arizona, Tucson, Arizona, USA

03:40 - 04:00pm: Hybrid QNN (H-QNN) for Intrusion Detection

Shijun Tang

Department of Computer Science, Schreiner University,

Kerrville, Texas, USA

SESSION 13-ZOOM: ---> ICDATA, SERP, FECS, ESCS TRACKS

SCOPE: DATA SCIENCE, SOFTWARE ENGINEERING, AI, SECURITY,

APPLICATIONS

Chairs: TBA

July 22, 2025 (Tuesday); 04:00pm - 05:20pm

(ON-LINE / ZOOM)

04:00 - 04:20pm: Age-Related Differences and Implications for Development of

Advanced Driver Assistance Systems Shabnam Shabani, Michael Bauer

Department of Computer Science, The University of Western

Ontario, London, Ontario, Canaada

04:20 - 04:40pm: The Role of Provenance Modeling in Tracing and Reproducing

Explainable AI Pipelines Zerui Wang, Yan Liu

Department of Electrical and Computer Engineering,

Concordia University, Montreal, Canada

04:40 - 05:00pm: Integrating Generative AI into Blockchain and Marketing

Education at HBCUs: A Proposed Framework

Shanzhen Gao, Weizheng Gao, Theodore Andrews Jr.,

Arthur L. Wharton, Hank B. Strevel

Reginald F Lewis College of Business, Virginia State

University, Petersburg, Virginia, USA;

Department of Mathematics, Computer Science, and

Engineering Technology, Elizabeth City State University,

Elizabeth City, North Carolina, USA

05:00 - 05:20pm: FREE SLOT

05:20 - 05:40pm: FREE SLOT

05:40 - 06:00pm: FREE SLOT

<----- LOCATION: Ballrooms Galleria D & E ------> SESSION 9-WED (FECS, ICAI, ICOMP, SAM TRACK): (CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS) SCOPE: ALGORITHMS, SECURITY, AI, AND APPLICATIONS Co-Chairs: TBA July 23, 2025 (Wednesday); 08:20am - 10:00am (LOCATION: Ballrooms Galleria D & E) Numerical Solution for the One-Dimensional Schrodinger 08:20 - 08:40am: Equation and Allowed Energies of Quantized Systems Finn Christie (+ Gregory Wood) California State University Channel Islands, Camarillo, California, USA 08:40 - 09:00am: Artificial Intelligence in Cybersecurity Matthew N. O. Sadiku, Matthais Oteniya, Janet O. Sadiku Roy G. Perry College of Engineering, Prairie View A&M University, Prairie View, Texas, USA; Juliana King University, Houston, Texas, USA 09:00 - 09:20am: Blockchain in Agriculture Matthew N. O. Sadiku, Paul A. Adekunte, Janet O. Sadiku Roy G. Perry College of Engineering, Prairie View A&M University Prairie View, Texas, USA; Juliana King University Houston, Texas, USA; Int'l Institute of Professional Security Lagos, Nigeria 09:20 - 09:40am: Assessing Applied Behavior Analysis Provider Effectiveness with Gradient Boosting Austin Weingart, Anthony Andriano, Troy Weingart University of Colorado, Colorado Springs, Colorado, USA; United States Air Force Academy (USAF), USA 09:40 - 10:00am: CMR Vulnerabilities and Enhancing Game Payment System Protocols Pratham Khanal, Farjana Eishita Idaho State University, Pocatello, Idaho, USA 10:00 - 10:20am: BREAK (Refreshments) (LOCATION: Galleria B & C)

SESSION 10-WED (FECS, MSV, IPCV TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: EDUCATION + IMAGING SCIENCE + SIMULATION & MODELING

Co-Chairs: TBA

July 23, 2025 (Wednesday); 10:20am - 11:40am

(LOCATION: Ballrooms Galleria D & E)

10:20 - 10:40am: Engaging First and Second Year Undergraduates with Parallel

and Distributed Computing: Lessons from Unplugged and

Game-Based Activities Xiaoyuan Suo, Timila Dangol

Webster University, St.Louis, MO, USA

10:40 - 11:00am: Python Pioneers: A K-12 Just-in-Time, Culturally Relevant,

Computational Thinking Based Python Learning Experience Oluwagbeminiyi Johnson, Marlon Mejias, Luce-Melissa Kouaho,

and Victor Mack

University of North Carolina at Charlotte, North Carolina, USA

11:00 - 11:20am: Predicting Trends in Domain Name Registrations Using

a VAR Model

Takaharu Ui, Shota Ikehara, Kentaro Mori, Akihiro Kaneko,

and Hiroo Hirose

Department of Engineering and Management, Suwa University of

Science, Nagano, Japan;

Education and Training Center, Japan Registry Services Co.,

Ltd., Tokyo, Japan;

Software Development Department, Japan Registry Services Co.,

Ltd., Tokyo, Japan

11:20 - 11:40am: Morphological Component Analysis for Micro-Doppler Signal

Decomposition in Outdoor Environments

Guillaume Pouget, Aurelie Montarnal, Jerome Landre, Maria Riveiro, Charles Piffault, Sebastien Grand,

and Bruno Meriaux, Frederick Benaben

Centre Genie Industriel, Universite Toulouse - Mines Albi,

Campus Jarlard, Albi, France; EPSI, Beauzelle, France;

ISyE, Georgia Institute of Technology, Atlanta, Georgia, USA;

Computer Science and Informatics, Jonkoping University,

Jonkoping, Sweden

11:40 - 12:20pm: INVITED LECTURE:

THE FUTURE IS INTEGRATED: PREDICTIVE INTELLIGENCE FOR

SEMICONDUCTOR SUPPLY CHAINS

Deepshikha Shekhawat

Business Intelligence Program Manager, AMD, Inc., USA; Affiliated with Fortune 500 Companies, including AMD

and Applied Materials (LOCATION: Galleria D & E)

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

SESSION 11-WED (HIMS, SERP TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)
SCOPE: BUSINESS INTELLIGENCE + SOFTWARE ENGINEERING +

HEALTH INFORMATICS

Co-Chairs: Deepshikha Shekhawat

Business Intelligence PM | AMD, USA July 23, 2025 (Wednesday); 01:00pm - 02:00pm

(LOCATION: Ballrooms Galleria D & E)

01:00 - 01:20pm: Applying Business Intelligence to Cancer Incidence Analysis

in a Population-Based Registry

Ricardo Timaran Andrea Bravo, Luisa Bravo, Fredy Vidal,

Arsenio Hidalgo, Anivar Chaves

Colombia

01:20 - 01:40pm: Best Practice of Scenario-Based Modeling for Humanoid Software

Validation

Sangho Lee, Janghwan Kim, R. Young Chul Kim Hongik University, Sejong, Republic of Korea;

Rastech, Daejeon, Republic of Korea

01:40 - 02:00pm: An Empirical Study on the Evolution and Vulnerabilities of

Maven Artifacts

Nirajan Bhattarai, Riley Stratton, Minhaz Zibran

Department of Computer Science, Idaho State University,

Idaho, USA

SESSION 12-WED (BIOENG TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: BIOMEDICAL ENGINEERING & SCIENCES

Co-Chairs: TBA

July 23, 2025 (Wednesday); 02:00pm - 03:00pm

(LOCATION: Ballrooms Galleria D & E)

02:00 - 02:20pm: Streamlining Breath Analysis Methods for Rapid and Low-Cost

Diabetes Detection and Dataset Collection

Piotr J. Smieja, Jiang Lu, Xingang Fu, Ting Zhang

Department of Computer Engineering,

University of Houston - Clear Lake, Houston, Texas, USA;

Department of Electrical and Biomedical Engineering,

University of Nevada Reno, Reno, Nevada, USA; Department of Computer Science, University of

Houston - Downtown, Houston, Texas, USA

02:20 - 02:40pm: Novel Composite Nerve Guidance Conduits with Controlled

Degradation and Drug Release for Peripheral Nerve Regeneration

Deepak Khare, Jiaying Wang, Xiaojun Yu

Department of Biomedical Engineering, Stevens Institute of

Technology, New Jersey, USA

02:40 - 03:00pm: Real-Time Pose Evaluation and Health Feedback System for

Fitness Using AI

Given Mark Garcia, Jasper Liu, Yuliang Zhao, Carol Yan,

Reiniery Villalta, Heng Wu

Obra D. Tomkins High School, Houston, Texas, USA; Diamond Bar High School, Diamond Bar, California, USA; Software Development, Google Developer Group, La Verne,

California, USA;

Software Development, Google Developer Group, Fremont,

California, USA;

Computer Science and Computer Engineering Department, University of La Verne, La Verne, California, USA

03:00 - 03:20pm: BREAK (Refreshments) & POSTERS
July 23, 2025 (Wednesday)
(LOCATION: Ballrooms Galleria B & C)

- O. Radiomic Biomarker Discovery and Lung Cancer Staging Using Gradient Boosted Decision Trees
 Nezamoddin N. Kachouie, Audrey Eley
 Department of Mathematics and Systems Engineering, Florida Institute of Technology, Melbourne, Florida, USA;
 Department of Electrical Engineering and Computer Science, Florida Institute of Technology, Melbourne, Florida, USA
- O. A Multivariate Sparse Group Lasso (MSGL) for Lung Cancer Stratification
 Nezamoddin N. Kachouie, Mohamed Jaber, and Zarindokht (Mary) Helforoush
 Department of Mathematics and Systems Engineering, Florida Institute of Technology, Melbourne, Florida, USA;
 Department of Electrical Engineering and Computer Science, Florida Institute of Technology, Melbourne, Florida, USA
- O. (May present online/zoom instead)
 Federated Lung Nodule Segmentation Utilizing Hybrid
 Transformer-Unet Architecture
 Sapthak Mohajon Turjya, Mulham Fawakherji
 Kalinga Institute of Industrial Technology, Bhubaneswar,
 India; North Carolina Agricultural and Technical State
 University. Greensboro, North Carolina, USA
- O. Evaluating the Impact of Local Knowledge Document File
 Types on the Performance of Large Language Models
 Dianeliz Ortiz Martes, Nezamoddin N. Kachouie
 Department of Mathematics and Systems Engineering,
 Florida Institute of Technology, Florida, USA;
 Department of Electrical Engineering and Computer Science,
 Florida Institute of Technology, Florida, USA
- O. (May present online/zoom instead)
 A Transformer-CNN Hybrid Autoencoder for Accurate and
 Unsupervised Plant Disease Localization
 Mulham Fawakherji
 North Carolina Agricultural and Technical State University.
 Greensboro, North Carolina, USA
- O. LLM-Based Benchmarking and Performance Assessment of Paraphrased Sentences
 Dianeliz Ortiz Martes, Evan Gunderson, Caitlin Neuman, and Nezamoddin N. Kachouie
 Department of Mathematics and Systems Engineering, Florida Institute of Technology, Florida, USA;
 Department of Electrical Engineering and Computer Science, Florida Institute of Technology, Florida, USA;
 Department of Ocean Engineering and Marine Sciences, Florida Institute of Technology, Florida, USA

O. Model Construction for Complex Systems Using Systems
Dynamics Aware Neural Networks
Sakir Yucel
Wexford, PA, USA

SESSION 13-WED (MSV, ICAI, FECS, SAM TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)
SCOPE: AI, DATA SCIENCE, ALGORITHMS, EDUCATION, SECURITY

Co-Chairs: Tanwir Zaman Walmart Labs, USA

July 23, 2025 (Wednesday); 03:20pm - 04:40pm

(LOCATION: Ballrooms Galleria D & E)

03:20 - 03:40pm: Center-Surround Improves Multimodal Learning

Marc Estafanous, Evan Mattson, Erhan Guven

Johns Hopkins University, Baltimore, Maryland, USA

03:40 - 04:00pm: From Data to Decision: Ethical Responses to Bias in AI Systems

Miah Weems, Hui Liu

Department of Computer Science,

Missouri State University, Springfield, Missouri, USA

04:00 - 04:20pm: Enhancing Granular Sentiment Classification with

Chain-of-Thought Prompting in Large Language Models Vihaan Miriyala, Smrithi Bukkapatnam, Lavanya Prahallad John F Kennedy High School, Fremont, California, USA; Queensland Academy for Science Mathematics and Technology,

Australia;

Research Spark Hub Inc., California, USA

04:20 - 04:40pm: Fraudulent Digital Fingerprint: Developing a Dynamic Scam

Detection Tool Through Machine Learning and Network Analysis

Ed Pearson III, Daniel Lambo

Alabama A&M University, Normal, Alabama, USA

SESSION 14-WED (ICDATA, AI, FECS TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS) SCOPE: DATA SCIENCE, AI & APPLICATIONS, EDUCATION

Co-Chairs: Tanwir Zaman Walmart Labs, USA

July 23, 2025 (Wednesday); 04:20pm - 06:00pm

(LOCATION: Ballrooms Galleria D & E)

04:20 - 04:40pm: Optimizing Mobility: A Scalable Real-Time Warehouse for

Intelligent Transportation Analytics Buddhi Ayesha Rathnayaka Hewa Kirindage Don, Uthayasanker Thayasivam, Umashanger Thayasivam

Rowan University, USA

04:40 - 05:00pm: Enhancing Incident Root Cause With Confidence Using Zebraai

Christopher Allen, Xin Bai, Juan Quintana, Mason Torres,

and Pramila Padmanabhan

The Microsoft Corporation, Redmond, Washington, USA

05:00 - 05:20pm: Semantic Risk Scoring of Aggregated Metrics: An AI-Driven

Approach for Healthcare Data Governance

Mohammed Omer Shakeel Ahmed

University of Texas at Arlington, Texas, USA

05:20 - 05:40pm: Development of Interdisciplinary Computing-Based Programs for

Democratizing Computing Workforce

Melody Moh, Rula Khayrallah, Wendy Lee, Teng-Sheng Moh, David Taylor,

and Ching-seh Mike Wu

San Jose State University, San Jose, California, USA

05:40 - 06:00pm: Integrating Programming Beyond CS to Foster Inclusive Computing Literacy

Wendy Lee, Rula Khayrallah, Tahere Arabghalizi, Melody Moh San Jose State University, San Jose, California, USA

<----> LOCATION: Ballroom Galleria A -----> SESSION 15-WED (CSC, ICEQT, ICAI TRACKS): (CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS) SCOPE: QUANTUM COMPUTING + SCIENTIFIC COMPUTING + AI Co-Chairs: TBA July 23, 2025 (Wednesday); 08:20am - 10:00am (LOCATION: Ballroom Galleria A) 08:20 - 08:40am: FREE SLOT 08:40 - 09:00am: Beyond the Black Box: Deep Regression with Insight for More Accurate and Interpretable Supply Chain Forecasting Beilei Zhu, Li Fan Intel Corporation, Hillsboro, Oregon, USA Crypto-Agility in Post-Quantum Cybersecurity with AI-Driven 09:00 - 09:20am: Dynamic Key Management Don Roosan, Rubayat Khan, Saif Nirzhor, Inyene Essien-Aleksi Department of Computer Science, Merrimack College, North Andover, Massachusetts, USA; University of Nebraska Medical Center, Omaha, Nebraska, USA; UT Southwestern Medical Center, Dallas, Texas, USA; School of Health Sciences, Merrimack College, North Andover, Massachusetts, USA 09:20 - 09:40am: Quantum-Inspired Clustering Techniques for Malware Detection in Supply Chain Networks Vishal H. Kothavade, Sthefanie J. G. Passo, John J. Prevost ECE Department, University of Texas at San Antonio, Texas, USA 09:40 - 10:00am: Variational Quantum Biosimulation to Decipher Protein Interaction Networks for Autism Spectrum Disorder Don Roosan, Saif Nirzhor, Rubayat Khan, Christopher Stuetzle Department of Computer Science, Merrimack College, North Andover, Massachusetts, USA; UT Southwestern Medical Center, Dallas, Texas, USA; University of Nebraska Medical Center, Omaha, Nebraska, USA 10:00 - 10:20am: BREAK (Refreshments)

(LOCATION: Galleria B & C)

SESSION: 16-WED (CSC TRACK)

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS) SCOPE: MILITARY AND DEFENSE MODELING AND SIMULATION

Chairs: Douglas D. Hodson (Chair)

Professor, Computer Science and Engineering Department, the US Air Force Institute of Technology, USA;

Michael R. Grimaila (Co-Chair)

Professor & Head, Systems Engineering and Management

Department, the US Air Force Institute of

Technology, USA;

Torrey J. Wagner (Co-Chair)

Assistant Professor of Data Analytics supporting the AFIT/EN Data Analytics graduate certificate program, USA

July 23, 2025 (Wednesday); 10:20am - 11:00am (LOCATION: Ballroom Galleria A)

10:20 - 10:40am:

Cost Estimation of DoD ACAT 1 Software Programs: Statistical

Regression vs. Neural Networks

Stephen D. Chatterton, Torrey Wagner, Edward D. White, Jonathan D. Ritschel, Michael J. Brown, Shawn M. Valentine Data Analytics Certificate Program, Air Force Institute of

Technology, Wright-Patterson AFB, Ohio, USA;

Graduate School of Systems Engineering and Management, Air Force Institute of Technology, Wright-Patterson AFB, USA; Graduate School of Mathematics and Statistics, Air Force Institute of Technology, Wright-Patterson AFB, Ohio, USA; AFLCMC/FZCE, Air Force Life Cycle Management Center,

Wright-Patterson AFB, Ohio, USA

10:40 - 11:00am: Early Fault Detection and Remaining Useful Life Prediction

in CMAPSS Engines

D. Ellington, D. D. Hodson, M. R. Grimaila, B. Langhals

Air Force Institute of Technology,

Wright-Patterson Air Force Base, Ohio, USA

SESSION 17-WED (CSC TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: QUANTUM COMPUTING & SECURITY

Co-Chairs: TBA

July 23, 2025 (Wednesday); 11:00 - 11:40am

(LOCATION: Ballroom Galleria A)

11:00 - 11:20am: Lattice-Based Encryption in Building Post Quantum-Resistant

Algorithms for Next-Generation Security

Rubayat Khan, Tiffany Khou, Saif Nirzhor, Don Roosan

University of Nebraska Medical Center, Omaha, Nebraska, USA; Western University of Health Sciences, Pomona, California, USA;

University of Texas Southwestern Medical Center, Dallas,

Texas, USA;

School of Engineering and Computational Sciences, Merrimack College, North Andover, Massachusetts, USA

11:20 - 11:40am: AI-Sensing Neuromorphic Computing for Cybersecurity in

Healthcare Data Lakes

Saif Nirzhor, Rubayat Khan, Tiffany Khou, Don Roosan University of Texas Southwestern Medical Center, Dallas,

Texas, USA;

University of Nebraska Medical Center, Omaha, Nebraska, USA; Western University of Health Sciences, Pomona, California, USA;

School of Engineering and Computational Sciences, Merrimack College, North Andover, Massachusetts, USA

-----> PLEASE GO TO Galleria D & E FOR INVITED LECTURE

11:40 - 12:20pm: INVITED LECTURE:

THE FUTURE IS INTEGRATED: PREDICTIVE INTELLIGENCE FOR

SEMICONDUCTOR SUPPLY CHAINS

Deepshikha Shekhawat

Business Intelligence Program Manager, AMD, Inc., USA; Affiliated with Fortune 500 Companies, including AMD

and Applied Materials
(LOCATION: Galleria D & E)

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

SESSION 18-WED (CSC, FCS TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS) SCOPE: SCIENTIFIC COMPUTING + THEORIES/FOUNDATIONS

Co-Chairs: TBA

July 23, 2025 (Wednesday); 01:00pm - 02:20pm

(LOCATION: Ballroom Galleria A)

01:00 - 01:20pm: Generalized Anti-Symmetry

Peter M. Maurer

Department of Computer Science, Baylor University,

Waco, Texas, USA

01:20 - 01:40pm: Generalized Hierarchical Symmetry

Peter M. Maurer

Department of Computer Science, Baylor University,

Waco, Texas, USA

01:40 - 02:00pm: Enhanced Pneumonia Detection in Chest X-rays via KPCA and

Multi-Kernel SVM

Zhixing Tan, Wenquan Cui, Kangrong Tan, Shozo Tokinaga

Department of Mathematics, Faculty of Education,

WASEDA University, Japan;

Department of Statistics and Finance, University of Science

and Technology of China, China;

Department of Economics, Kurume University, Japan

02:00 - 02:20pm: Quantum-Resilient Edge Computing Cryptography for

Resource-Limited Medical IoT

Rubayat Khan, Saif Nirzhor, Don Roosan

University of Nebraska Medical Center, Omaha, Nebraska, USA; University of Texas Southwestern Medical Center, Dallas,

Texas, USA;

School of Engineering and Computational Sciences, Merrimack College, North Andover, Massachusetts, USA

SESSION 19-WED (ICAI, IPCV, SERP, ACC, CSC, SAM TRACKS):

(CONCURRENT SESSION WITH ON-SITE & ONLINE SESSIONS)

SCOPE: ARTIFICIAL INTELLIGENCE, IMAGING SCIENCE, SCIENTIC COMPUTING

COGNITIVE COMPUTING, SOFTWARE ENGINEERING, SECURITY

Co-Chairs: TBA

July 23, 2025 (Wednesday); 02:20pm - 05:00pm

(LOCATION: Ballroom Galleria A)

02:20 - 02:40pm: Prompt Engineering Approaches to Reducing the Costs in

LLM-Based Automated Test Case Generation

So Onishi, Keisuke Kitamura, Akihito Kohiga, Takahiro Koita

Graduate School of Science and Engineering, Doshisha University, Kyotanabe, Kyoto, Japan

02:40 - 03:00pm: Multi-domain Feature Extraction and Comparative Evaluation

of Classification Accuracy for Punching Motions in Mass Boxing

Shinjiro Okajima, Taiyo Kimura, Akihito Kohiga, and

Takahiro Koita

Department of Information Systems Design, Doshisha University,

Kyotanabe-shi, Kyoto-fu, Japan

03:00 - 03:20pm: BREAK (Refreshments) & POSTERS
July 23, 2025 (Wednesday)
(LOCATION: Ballroom Galleria B & C)

- O. Radiomic Biomarker Discovery and Lung Cancer Staging Using Gradient Boosted Decision Trees
 Nezamoddin N. Kachouie, Audrey Eley
 Department of Mathematics and Systems Engineering, Florida Institute of Technology, Melbourne, Florida, USA;
 Department of Electrical Engineering and Computer Science, Florida Institute of Technology, Melbourne, Florida, USA
- O. A Multivariate Sparse Group Lasso (MSGL) for Lung Cancer Stratification
 Nezamoddin N. Kachouie, Mohamed Jaber, and Zarindokht (Mary) Helforoush
 Department of Mathematics and Systems Engineering, Florida Institute of Technology, Melbourne, Florida, USA;
 Department of Electrical Engineering and Computer Science, Florida Institute of Technology, Melbourne, Florida, USA
- O. (May present online/zoom instead)
 Federated Lung Nodule Segmentation Utilizing Hybrid
 Transformer-Unet Architecture
 Sapthak Mohajon Turjya, Mulham Fawakherji
 Kalinga Institute of Industrial Technology, Bhubaneswar,
 India; North Carolina Agricultural and Technical State
 University. Greensboro, North Carolina, USA
- O. Evaluating the Impact of Local Knowledge Document File
 Types on the Performance of Large Language Models
 Dianeliz Ortiz Martes, Nezamoddin N. Kachouie
 Department of Mathematics and Systems Engineering,
 Florida Institute of Technology, Florida, USA;
 Department of Electrical Engineering and Computer Science,
 Florida Institute of Technology, Florida, USA
- O. (May present online/zoom instead)
 A Transformer-CNN Hybrid Autoencoder for Accurate and
 Unsupervised Plant Disease Localization
 Mulham Fawakherji
 North Carolina Agricultural and Technical State University.
 Greensboro, North Carolina, USA
- O. LLM-Based Benchmarking and Performance Assessment of Paraphrased Sentences
 Dianeliz Ortiz Martes, Evan Gunderson, Caitlin Neuman, and Nezamoddin N. Kachouie
 Department of Mathematics and Systems Engineering, Florida Institute of Technology, Florida, USA;
 Department of Electrical Engineering and Computer Science, Florida Institute of Technology, Florida, USA;
 Department of Ocean Engineering and Marine Sciences, Florida Institute of Technology, Florida, USA
- O. Model Construction for Complex Systems Using Systems Dynamics Aware Neural Networks Sakir Yucel Wexford, PA, USA

O. A Survey of Vulnerabilities and Emerging Defenses in GANs, VAEs, and Transformers
Jothsna Praveena Pendyala, Aman Goyal
Clark University, USA;
Carnegie Mellon University, USA

03:20 - 03:40pm: Robust DDoS-Attack Classification with 3D CNNs Against

Adversarial Methods

Landon Bragg, Nathan Dorsey, Josh Prior, Ben Kim, John Ajit,

Nate Willis, Pablo Rivas

Department of Computer Science, Baylor University,

Waco, Texas, USA

03:40 - 04:00pm: The Use of ChatGPT to Teach Coding Inhibits Software

Development or Supplements Coding Education Jose A. Vega, Juan B. Varela, Angel Ojeda

Department of Technology & Security, Bowie State University,

Bowie, Maryland, USA;

Montgomery Community College, USA; Universidad de Puerto Rico, Puerto Rico; Universidad del Turabo, Puerto Rico

04:00 - 04:20pm: Digital Activity Recognition and Cybersecurity Procedural Task

Extraction with Video LLMs: A Cognitive Computing Framework

Terry Traylor, Ben Bernard, Pann Ajjimaporn

North Dakota State University, Fargo, North Dakota, USA

04:20 - 04:40pm: Preserving Medical Meaning Across Languages: A UMLS-Driven

Approach with Small Language Models Nezih Nieto, Jesus Dassaef Lopez-Barrios,

Benjamin Tellez-Ramirez, Juan Vladimir Padilla-Lopez,

Ilse Karena De-Anda-Garcia, Sabur Butt,
Miguel Gonzalez-Mendoza, Gilberto Ochoa-Ruiz,

Hector Gilbran Ceballos-Cancino School of Engineering and Science,

Tecnologico de Monterrey, Monterrey, NLE, Mexico

04:40 - 05:00pm: A Comparative Analysis of Taint Analysis Tools: Enhancing

Security Through Combined Static Analysis Approaches

Young Lee, Mohammed Tausif Ansari, Jeong Yang

Texas A&M University - San Antonio, San Antonio, Texas, USA

05:00 - 05:20pm: FREE SLOT

05:20 - 05:40pm: FREE SLOT

05:40 - 06:00pm: FREE SLOT

ONLINE / ZOOM SESSIONS

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

SESSION 14-ZOOM: ---> EEE, FECS, IPCV TRACKS

SCOPE: BUSINESS PROCESSES, EDUCATION, IMAGING SCIENCE

Chairs: TBA

July 23, 2025 (Wednesday); 08:00am - 09:40am

(ON-LINE / ZOOM)

08:00 - 08:20am: A Proposed Model for Resource Consumption Optimization

within Inter-Organizational Business Process Execution

Eyenga Ovono Tatiana, Atsa Etoundi Roger

University of Yaounde I, Cameroon

08:20 - 08:40am: Assessing Academic Success and Proficiency of Non-Computing

Students in Foundational Computing Courses

Monkgogi Mudongo, Tebo Leburu-Dingalo, Michael Esiefarienrhe

University of Botswana, Botswana; North West University, South Africa

08:40 - 09:00am: Detecting Canine Cataracts: A Deep Learning and Clustering

Approach

Henrique Costa, Luiz Pestana, Aaron Ludena, Sandra Jardim

Polytechnic University of Tomar, Tomar, Portugal; Smart Cities Research Center - Polytechnic

University of Tomar, Tomar, Portugal

09:00 - 09:20am: Future Multimedia Integrated Learning Methodologies and its

Applications in Digital Education

Douglas Omwenga Nyabuga

Mount Kigali University, Kigali, Rwanda

09:20 - 09:40am: Collaboration, Flipped Classrooms and the Challenge of Board

Tutorials in Mathematics Education Alan Bowen-James, Mary Ruth Freislich

Universal Business School Sydney, Group Colleges Australia;

School of Mathematics and Statistics,

University of New South Wales, Sydney, Australia

SESSION 15-ZOOM: ---> ICDATA, CSC, SAM TRACKS

SCOPE: DATA SCIENCE, SCIENTIFIC COMPUTING, ALGORITHMS,

SECURITY APPLICATIONS

Chairs: TBA

July 23, 2025 (Wednesday); 09:40am - 11:20am

(ON-LINE / ZOOM)

09:40 - 10:00am: Machine Learning and Explainable Artificial Intelligence

for Network Intrusion Detection

Madison Ngafeeson, Oluwatimileyin Favour Obagbuwa

Sol Plaatje University, South Africa

10:00 - 10:20am: Is the Indian Social Sector Data Science Ready?

Satender Rana, Sanchita Mukherjee, Swetha Prakash, and

Sreya Menon

Indian School of Development Management, India

10:20 - 10:40am: Comparative Analysis of Scheduling Algorithms Relative

to O(n) Characteristics

Ezekiel Okike, Ariq Ahmer, Nomalanga Silhwar University of Botswana, Gaborone, Botswana

10:40 - 11:00am: Typosquatting Detection at Scale: A Review of DNS-Focused

Approach to Domain Abuse

Serra Uysal, Mehmet Tahir Sandikkaya Department of Computer Engineering,

Istanbul Technical University (ITU), Turkey

11:00 - 11:20am: NFC-PUF Three-pass Authentication for Supply Blockchains

Norbert Olah, Tamas Giraszi, Mate Vajda, Andrea Huszti

Faculty of Informatics, University of Debrecen,

Debrecen, Hungary

SESSION 16-ZOOM: ---> SAM, ESCS, CSC, ICDATA TRACKS

SCOPE: SECURITY + CPS, SCIENTIFIC COMPUTING + AI + WSN + EDUCATION +

DATA SCIENCE

Chairs: TBA

July 23, 2025 (Wednesday); 11:20am - 03:00pm

(ON-LINE / ZOOM)

11:20 - 11:40am: Competency-Based Cybersecurity Education: Developing

Industry-Aligned Curriculum Modules Major Houston, Jing Chen, Darren Waldrep

Department of Computer Science, Athens State University,

Athens, Alabama, USA;

Department of Management, Athens State University,

Athens, Alabama, USA

11:40a - 12:00p: Branch-Commit-Validate: A Git-Inspired Workflow for Autonomous

Red-Team Agents

Chinmay Shringi, Alon Hillel-Tuch, Sariya Rizwan

Department of Computer Engineering, New York University,

Brooklyn, New York, USA;

Lubin School of Business, Pace University,

Brooklyn, New York, USA

12:00 - 12:20pm: Mitigating Ransomware and Data Breaches in Mobile Health

Applications: An Encryption and Integrity-Based Approach Sarah Dziobak, Valerie Nielson, Brendon Wolfe, Rui Zhu,

and Huirong Fu

Oakland University, USA; Kettering University, USA

12:20 - 12:40pm: ACLR: A Stacked Deep Learning Approach for Botnet Detection

Using Network Traffic Analysis

Srinija Reddy Kotla, Xinli Wang, Vijay Bhuse

College of Computing, Grand Valley State University,

Allendale, Michigan, USA

12:40 - 01:00pm: Container Performance in Secure Space Systems

Shariar M. Alamgir

Embedded and Specialized Computing Department, The Aerospace Corporation, El Segundo, California, USA

01:00 - 01:20pm: A Secure and Private Food Recommendation Framework Using

Game-Theoretic Adversarial Learning

Sai Akshaya Banda, Raihana Tasnim, Madhuri Siddula,

Olusola T. Odeyomi, Sajad Khorsandroo

North Carolina A&T State University, Greensboro,

North Carolina, USA

01:20 - 01:40pm: Parallel and Sequential Algorithms for Detecting Sparse

Binary Squares with Three Ones

Shanzhen Gao, Weizheng Gao, Jianning Su, Julian Allagan,

and Hank B. Strevel

Reginald F Lewis College of Business, Virginia State

University, Petersburg, Virginia, USA;

Department of Mathematics, Computer Science and Engineering Technology, Elizabeth City State University, Elizabeth City,

North Carolina, USA;

Department of Mathematics, Computer Science and Engineering,

Perimeter College, Georgia State University, Atlanta, Georgia, USA

Evolving Generators Using Policy Gradients With Parameter-Based 01:40 - 02:00pm: Exploration for InfoGAN Training Mark Nuppnau, Khalid Kattan, Robert G. Reynolds Department of Computer Science, Wayne State University, Detroit, Michigan, USA; Department of Computer Science, University of Michigan - Dearborn, Michigan, USA AODV-M: The AODV Modified with Link Quality Prediction for WSN 02:00 - 02:20pm: Laura Meta Dongmo, Miguel Landry Foko Sindjoung, Mthulisi Velempini, and Aymar Le Pere Tchimwa Bouom University of Dschang, Dschang, Cameroon; Department of Computer Science, University of Limpopo, Mankweng, South Africa 02:20 - 02:40pm: How Students Tackle Coding Tasks in Formative Assessment Chen Li, Mo Zhang, Amy J. Ko, Min Li, Ben Zhou, Hongwen Guo Educational Testing Service, Princeton, New Jersey, USA; University of Washington, Seattle, Washington, USA 02:40 - 03:00pm: A Survey of Vulnerabilities and Emerging Defenses in GANs, VAEs, and Transformers Jothsna Praveena Pendyala, Aman Goyal Clark University, USA; Carnegie Mellon University, USA 03:00 - 03:20pm: FREE SLOT 03:20 - 03:40pm: FREE SLOT 03:40 - 04:00pm: FREE SLOT 04:00 - 04:20pm: FREE SLOT 04:20 - 04:40pm: FREE SLOT 04:40 - 05:00pm: FREE SLOT

<------ LOCATION: Ballrooms Galleria D & E------> SESSION 20-THU (ICAI TRACK): (CONCURRENT SESSION WITH ON-SITE SESSIONS) SCOPE: ARTIFICIAL INTELLIGENCE AND APPLICATIONS Co-Chairs: TBA July 24, 2025 (Thursday); 08:20am - 10:00am (LOCATION: Ballrooms Galleria D & E) 08:20 - 08:40am: A Study on the Context-based Trustworthiness to Decrease Confirmation Bias and Improve Evenness of the Generated Content Hyun Jung Lee Goyang City Institute, Goyang, Republic of South Korea 08:40 - 09:00am: RIASEC GPT Chatbot and Eye Tracking: Conscious vs. Subconscious Vocational Interest Inventory Jennifer Mei-ling Chun, Nada Attar, Sayma Akther, Luke Liu San Jose State University, San Jose, California, USA; Santa Clara University, Santa Clara, California, USA 09:00 - 09:20am: A Type-3 Fuzzy-Fractal Stage Classification of Retinal Pathology Patricia Melin, Oscar Castillo Tijuana Institute of Technology, TecNM, Tijuana, B.C., Mexico 09:20 - 09:40am: Deep Learning for Detection of Frosty Pod Rot in Cacao Pods: A Comparative Analysis Vaishnavi Sen, Serineh Megerdichian, Alex Modarresi California State University, Northridge, California, USA 09:40 - 10:00am: Sensitivity Parameter Analysis in the Brainstorm Optimization Algorithm Norma Robles Rosario, Oscar Castillo, Fevrier Valdez, and Patricia Melin Tijuana Institute of Technology, TecNM, Baja california, Mexico 10:00 - 10:20am: BREAK (Refreshments) (LOCATION: Galleria B & C)

SESSION 21-THU (ICAI TRACK):

(CONCURRENT SESSION WITH ON-SITE SESSIONS)

SCOPE: ARTIFICIAL INTELLIGENCE: ALGORITHMS & APPLICATIONS

Co-Chairs: Tanwir Zaman Walmart Labs, USA

July 24, 2025 (Thursday); 10:20am - 11:20am

(LOCATION: Ballrooms Galleria D & E)

10:20 - 10:40am: Explainable Feature Selection using Feature Weighted

Self-Organising Maps

Nwaebuni Ebube Odega, Andrew Starkey

School of Engineering, University of Aberdeen, Scotland,

United Kingdom (UK)

10:40 - 11:00am: Performance of LLM-Generated Code

Lisa L. Lacher, Mark C. Lewis, Elizabeth M. Ruetschle,

and Amanda A. Sickafoose

University of Houston Clear Lake, Clear Lake, Texas, USA;

Planetary Science Institute, Tucson, Arizona, USA;

Chatmeter, San Diego, California, USA

11:00 - 11:20am: FREE SLOT

SESSION 22-THU (ICAI TRACK):

(CONCURRENT SESSION WITH ON-SITE SESSIONS)

SCOPE: ARTIFICIAL INTELLIGENCE: APPLICATIONS AND ML

Co-Chairs: Tanwir Zaman Walmart Labs, USA

July 24, 2025 (Thursday); 11:20am - 12:20pm

(LOCATION: Ballrooms Galleria D & E)

11:20 - 11:40am: Does Embodiment Still Matter? Comparing User Experience

With LLM-Powered Agents Mriganka Biswas, John Murray

University of Sunderland, Sunderland, UK

11:40 - 12:00pm: Benchmarking Aircraft Detection using Pretrained Models

Praneel Acharya, JaeJun Lee, Devendra Deepkiran Adhikari,

Nhut Huynh, Kim-Doang Nguyen

Aviation Department, Minnesota State University, Mankato,

Minnesota, USA;

Department of Mechanical and Civil Engineering,

Florida Institute of Technology, Melbourne, Florida, USA

12:00 - 12:20pm: FREE SLOT

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

SESSION 23-THU (ICOMP TRACK):

(CONCURRENT SESSION WITH ON-SITE SESSIONS)
SCOPE: INTERNET COMPUTING, IOT, AND APPLICATIONS

Co-Chairs: TBA

July 24, 2025 (Thursday); 01:00pm - 02:00pm

(LOCATION: Ballrooms Galleria D & E)

01:00 - 01:20pm: Placement of Distributed Machine Learning Services for AI

and Smart Grid Enabled IoT Platform

Jeremie Rodez, Patricia Stolf, Thierry Monteil

University of Toulouse-Jean Jaures, Toulouse, France;

INSA, Toulouse, France

01:20 - 01:40pm: Carbon Flexing for Individual Households - A Study Based on

Electrical Carbon Data

Olaf Droegehorn, Karolina Bargiel

Department of Automation & Computer Science, Harz University

of Applied Sciences, Wernigerode, Germany;

Fitzrovia House, Cleveland Street, London, England

01:40 - 02:00pm: Express Dialer 2

Dwight Deugo

The School of Computer Science, Carleton University, Ottawa,

Canada

SESSION 24-THU (ICOMP, ICWN TRACKS):

(CONCURRENT SESSION WITH ON-SITE SESSIONS)

SCOPE: INTERNET COMPUTING, IOT, WIRELESS SENSOR NETWORKS

Co-Chairs: TBA

July 24, 2025 (Thursday); 02:00pm - 03:00pm

(LOCATION: Ballrooms Galleria D & E)

02:00 - 02:20pm: Sensor Data Synchronization in Wireless Sensor Networks with

Unsynchronized Local Clocks

Hiroaki Higaki

Department of Robotics and Mechatronics, Tokyo Denki University, Tokyo, Japan

02:20 - 02:40pm: Visualization and Monitoring System for Autonomous Vehicles

Hassan Rajaei, Akhik Kovuru Department of Computer Science,

Bowling Green State University, Bowling Green, Ohio, USA

02:40 - 03:00pm: Edge Fluent: How AI, IoT, and Small Language Models (SLMs)

Are Powering Inclusive ESG Platforms for a Sustainable Future Chandrasekar Vuppalapati, Anitha Ilapakurti, Shruti Vuppalapati,

Sandhya Vissapragada, Vanaja Mamidi, Sharat Kedari, Santosh Kedari, Jaya Vuppalapati, Karthik kallakur Hanumayamma Innovations and Technologies, Inc. Fremont, California, USA; Hanumayamma Innovations and Technologies

PVT Limited, Hyderbad, India;

Computer Engineering (CMPE Department), San Jose State

University, San Jose, California, USA

03:00 - 03:20pm: BREAK (Refreshments) & POSTERS

July 24, 2025 (Thursday) (LOCATION: Galleria B & C)

0. ...

SESSION 25-THU (CSC TRACKS):

(CONCURRENT SESSION WITH ON-SITE SESSIONS)

SCOPE: SCIENTIFIC COMPUTING, AI, AND APPLICATIONS

Co-Chairs: TBA

July 24, 2025 (Thursday); 03:20pm - 04:20pm

(LOCATION: Ballrooms Galleria D & E)

03:20 - 03:40pm: Reinforced ArCHitEcture Learning (RACHEL): A Reinforcement

Learning-Driven Neural Architecture Search Framework for

Efficient Ensemble Learning Alex Zhekai Zhang, Hui Liu

Cate School, Carpinteria, California, USA;

Department of Computer Science, Missouri State University,

Springfield, Missouri, USA

03:40 - 04:00pm: Density of States of Triangular Antiferromagnetic Ising

Models of Finite Size

Finn Christie, Gregory G. Wood

California State University Channel Islands,

Camarillo, California, USA

04:00 - 04:20pm: Causal Inference for Observational Studies: Deep Learning

Approaches to Counterfactual Generative Modeling

Seema Singh Saharan, Mary Malloy, John Kane

Department of Clinical Pharmacy, School of Pharmacy, University of California, San Francisco, California, USA; Cardiovascular Research Institute, University of California,

San Francisco, California, USA;

Departments of Medicine, University of California,

San Francisco, California, USA;

Departments of Pediatrics, University of California,

San Francisco, California, USA;

Department of Biochemistry and Biophysics,

University of California, San Francisco, California, USA

04:20 - 04:40pm: CLOSING REMARKS

(LOCATION: Ballrooms Galleria D & E)

04:40 - 05:00pm: FREE SLOT

05:00 - 05:20pm: FREE SLOT

05:20 - 05:40pm: FREE SLOT

05:40 - 06:00pm: FREE SLOT

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

SESSION 26-THU (PDPTA, SAM, CSC TRACKS):

(CONCURRENT SESSION WITH ON-SITE SESSIONS)

SCOPE: HPC, SCIENTIFIC COMPUTING, SECURITY APPLICATIONS

Co-Chairs: TBA

July 24, 2025 (Thursday); 08:20am - 10:00am

(LOCATION: Ballroom Galleria A)

08:20 - 08:40am: FREE SLOT

08:40 - 09:00am: FREE SLOT

09:00 - 09:20am: GPU Accelerated GMRES Solver for Efficient Sparse

Linear Systems

Khiem Luong, Sabbir Polak, Byunghyun Jang, Shuang Z. Tu

Department of Computer and Information Science, University of Mississippi, Oxford, Mississippi, USA; Department of Electrical & Computer Engineering, Jackson State University, Jackson, Mississippi, USA

09:20 - 09:40am: Zero-Shot Perception and Spatiotemporal Transformers for

Automated Gait and Footpad Score Classification

Ehsan Asali, Guoming Li, Mahtab Saeidifar, Tongshuai Liu, Venkat Umesh Chandra Bodempudi, Oluwadamilola Moyin Oso, Aravind Mandiga, Sai Akshitha Reddy Kota, Geng Yuan Department of Poultry Science, The University of Georgia,

Athens, Georgia, USA;

School of Computing, The University of Georgia, Athens,

Georgia, USA;

Institute for Artificial Intelligence, The University of

Georgia, Athens, Georgia, USA;

Institute for Integrative Precision Agriculture, The

University of Georgia, Athens, Georgia, USA;

College of Animal Science & Technology, Henan University of

Animal Husbandry and Economy, Zhengzhou, Henan, China

09:40 - 10:00am: FREE SLOT

10:00 - 10:20am: BREAK (Refreshments)

(LOCATION: Galleria B & C)

SESSION 27-THU (ICDATA TRACK):

(CONCURRENT SESSION WITH ON-SITE SESSIONS)
SCOPE: DATA SCIENCE AND COMPUTATIONAL SCIENCE

Co-Chairs: TBA

July 24, 2025 (Thursday); 10:20am - 11:20am

(LOCATION: Ballroom Galleria A)

10:20 - 10:40am: Open-source and Institution-specific Research Impact Evaluation

via Unsupervised Ranking

Maria Tomasso, Emon Nooruddin, Melinda Villagran

Translational Health Research Center, Texas State University,

San Marcos, Texas, USA;

Department of Computer Science, Texas State University,

San Marcos, Texas, USA

10:40 - 11:00am: A Computational Approach to Improving Fairness in K-means

Clustering

Guancheng Zhou, Haiping Xu, Hongkang Xu, Chenyu Li, and

Donghui Yan

University of Massachusetts Dartmouth, Massachusetts, USA

11:00 - 11:20am: FREE SLOT

SESSION 28-THU (ICDATA TRACK):

(CONCURRENT SESSION WITH ON-SITE SESSIONS) SCOPE: DATA SCIENCE + MACHINE LEARNING

Co-Chairs: TBA

July 24, 2025 (Thursday); 11:20am - 12:20pm

(LOCATION: Ballroom Galleria A)

11:20 - 11:40am: Machine Learning for B2B Sales Prediction: A Comparative Study

Guilherme Pires, Carina Pimentel, Luis Miguel Matos

University of Minho, Portugal

11:40 - 12:00pm: Using Generative AI and Multi-agent LLM Architectures for Topic

Summarization and Segmentation for Long Lists of Educational Videos Oscar Yllan Garza, Luz Maria Gonzalez Urena, Francisco J. Cantu

Tecnologico de Monterrey, Mexico

12:00 - 12:20pm: Disputing Facts: A Glimpse into Voting-Related Conversation

on TikTok

Mohamed Ahmed, Helge Marahrens, Lisa Singh, Pleasant Ballenger,

Diego DiMattina, Kenedy Ducheine, Aiden Ehrenreich,

Caroline Field, Kylie Griffiths, Lucy Olander, Katie Wilson

Georgetown University, Washington, D.C., USA

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

SESSION 29-THU (FECS, ESCS, HIMS TRACKS): (CONCURRENT SESSION WITH ON-SITE SESSIONS) SCOPE: COMPUTATIONAL SCIENCE, EDUCATION, AND APPLICATIONS Co-Chairs: TBA July 24, 2025 (Thursday); 01:00pm - 02:00pm (LOCATION: Ballroom Galleria A) 01:00 - 01:20pm: Integrating Virtual Reality and Research Methods into an Undergraduate Computer Science Elective Course Chunming Gao Department of Computer Science, Central Washington University, Ellensburg, Washington, USA 01:20 - 01:40pm: Energy-Aware Scheduling In Dvfs-Enabled Mixed-Criticality Systems Jennifer Travis, Hakduran Koc University of Houston-Clear Lake, Houston, Texas, USA 01:40 - 02:00pm: ALFABEATS: A Machine Learning Based Decision Support Platform for Biomedical Time Series Analysis Sasa Kendjel, Nikolina Frid, Eda Kalafatic, Kresmir Jozic, and Alan Jovic Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia; JANAF Plc, Sisak, Croatia 02:00 - 02:20pm: FREE SLOT 02:20 - 02:40pm: FREE SLOT 02:40 - 03:00pm: FREE SLOT 03:00 - 03:20pm: BREAK (Refreshments) & POSTERS July 24, 2025 (Thursday) (LOCATION: Galleria B & C) 0. ... 03:20 - 03:40pm: FREE SLOT 03:40 - 04:00pm: FREE SLOT 04:00 - 04:20pm: FREE SLOT 04:20 - 04:40pm: CLOSING REMARKS

(LOCATION: Ballrooms Galleria D & 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 2025 web site at

https://www.american-cse.org/csce2025/ https://www.american-cse.org/csce2025/program

The list that appears below includes all those papers and posters whose authors selected OPTION 3 or NR.

The 9th International Conference on Applied Cognitive Computing (ACC'25: July 21-24, 2025; Las Vegas, USA) https://american-cse.org/csce2025/conferences-ACC

- O. Emotion Analysis in Speech Based on Audio-Visual Fusion Zou Zhitao, Gulanbaier Tuerhong, Mairidan Wushouer, Tian Liwei School of Computer Science, Guangdong University of Science and Technology, Guangdong, China
- O. Harnessing Deterministic Chaos for Adaptive Gradient Optimization Kenneth Brezinski, Ken Ferens, Witold Kinsner Department of Electrical and Computer Engineering, University of Manitoba, Canada
- O. Moving Beyond Arbitrary Augmentations: K-Hop Connectivity for Robust Augmentation in Graph Contrastive Learning Tonni Das Jui, Mary Lauren Benton Baylor University, Waco, Texas, USA
- O. Intelligent Shading Classification for Smart Reconfigurable Photovoltaic Panels in Residential Solar Systems
 Varun Yedavilli, Akshat Desai, Jonathan Olivares, Sachin Lodhi, Robert Cruz, Santiago Monofre, Kevin Huang, Kanika Sood, Jaya Dofe, and Rakeshkumar Mahto
 Department of Electrical and Computer Engineering, California State University, Fullerton, California, USA;
 Department of Computer Science, California State University, Fullerton, California, USA;
 Troy High School, Fullerton, California, USA;
 Department of Technology and Engineering, Fullerton College, Fullerton, California, USA

The 26th International Conference on Bioinformatics & Computational Biology (BIOCOMP'25: July 21-24, 2025; Las Vegas, USA) https://american-cse.org/csce2025/conferences-BIOCOMP

- O. BlurFisheye: A Technique for Enhanced Biological Network Visualization Hanin Alzahrani, Sara Fernstad AL-Baha University, Saudi Arabia; Newcastle University, UK
- O. Leveraging Local LLMs for Taxonomy-Aware Analysis of STRING-Supported Species
 Hanin Alzahrani
 Al-Baha University, Saudi Arabia

The 11th International Conference on Biomedical Engineering & Sciences (BIOENG'25: July 21-24, 2025; Las Vegas, USA) https://american-cse.org/csce2025/conferences-BIOENG

O. Traffic Signal Detection System For The Visually Impaired Using Deep Learning Aaron Jiwei Bai, Chris Cheng Zhang St. George's School, Vancouver, BC, Canada

The 23rd International Conference on Scientific Computing (CSC'25: July 21-24, 2025; Las Vegas, USA) https://american-cse.org/csce2025/conferences-CSC

O. Enhancing Network Security in Multi-Cloud Environments through Adaptive Threat Detection
Kulani Olasy Chauke, Topside Ehleketani Mathonsi, Tonderai Muchenje Department of Information and Communication Technology,
Tshwane University of Technology, Pretoria, South Africa

O. Generative AI Applied to Digital Twins: Towards Improving Cyber-Physical Systems in the Industry Joao Pedro Fusco
University of Marilia, Marilia, Brazil

O. Heart Valvular Disease Detection Using Image-based Time Series and Transfer Learning
Turky N. Alotaiby, Nuwayyir A. Alsahle, Gaseb N. Alotibi, and Rawad A. Alqahtani
King Abdulaziz City for Science and Technology, KACST, Riyadh, Kingdom of Saudi Arabia;
Department of Computer Science and Information Technology, University of Tabuk, Tabuk, Kingdom of Saudi Arabia

O. Digital Skills and Higher Education: The Role of Artificial Intelligence in Teacher Training
Jorge Luis Rodriguez Zuniga, Emiro de la Hoz Franco, Alba Rut Pinto, and Silvia Margarita Baldiri
University of La Guajira, Colombia;
University of La Costa, Colombia

O. Hybrid Model Between Blockchain and Merkle Tree for the Protection of Personal Data Maria Alejandra Angarita, Gabriel Alejandro Maldonado, and Leonardo Juan Ramirez Lopez Osiris & Bioaxis Research Group, Universidad El Bosque, Bogota, Colombia

O. Academic Risk Prediction: An Artificial Intelligence-Based Approach
Using Psychoeducational Variables
Ruth Yalena Zuleta Torres, Pedro Javier Lopez Perez, Ethel de la Hoz,
and Dixon Salcedo Morillo
Universidad de la Costa, Barranquilla, Colombia

O. Evaluation of the Impact of Preprocessing and Selection of Characteristics on the Classification of Feelings
Wendy Morales Castro, Rafael Guzman Cabrera, Marco Bianchetti,
Jose Ruiz Pinales, Maria Susana Avila Garcia
Departamento de Estudios Multidisciplicarios Campus Yuriria,
Universidad de Guanajuato, Mexico;
Division de Ingenierias Campus Irapuato Salamanca, Mexico

O. Effective Concept Unlearning in Text-to-Video Diffusion Models: A Comparative Study Favoring Text Encoder Modification Arya Kumari, Aditya Alok, Manoj Kumar Gupta SoCSE, Shri Mata Vaishno Devi University Katra, India

- O. Synchronous Blocking Data Transfer Over Wi-Fi Using Java Fork-Join Versus Virtual Threads and Structured Concurrency Anil L. Pereira Georgia Gwinnett College, Lawrenceville, Georgia, USA
- O. Solar Storm Effects on Quantum Communication Network Performance Brett M. Martin, Michael K. Seery, Douglas D. Hodson, Torrey J. Wagner, Michael R. Grimaila, Anne Marie Richards, Wayne McKenzie Air Force Institute of Technology, Wright-Patterson Air Force Base, Ohio, USA

The 24th International Conference on e-Learning, e-Business, Enterprise Information Systems, & e-Government (EEE'25: July 21-24, 2025; Las Vegas, USA) https://american-cse.org/csce2025/conferences-EEE

- O. Using Data Mining for Effective Customer Relations in Retail Sector Amitava Karmaker University of Wisconsin-Stout, Menomonie, Wisconsin, USA
- O. EduRAG: Improving AI Teaching Assistants with Retrieval-Augmented Generation
 Geethika Vadlamudi, Robert Chun
 Department of Computer Science, San Jose State University,
 San Jose, California, USA

The 24th International Conference on Embedded Systems, Cyber-physical Systems, & Applications (ESCS'25: July 21-24, 2025; Las Vegas, USA) https://american-cse.org/csce2025/conferences-ESCS

O. Design and Evaluation of a Servo-Potentiometer Actuation System for SCARA Robots
Mert Kaval, Wilson Qiwei Sun, Apple Heiwun Ma, Yuetong Zhu, James Zhe Song, Haoyang Wang, Sky Yangziming Han, Chris Cheng Zhang

Department of Research and Development, Cansight Technology Corporation, Vancouver, BC, Canada;

DeGroot School of Business, McMaster University, Hamilton, ON, Canada; Harrow International School Hong Kong, Hong Kong;

Corpus Christi Catholic, Secondary School, Burlington, ON, Canada;

University of Toronto, Toronto, Canada;

Middle School Taiyuan, Shan'Xi, China;

A.R. MacNeil Secondary School, Richmond, BC, Canada;

Department of Research and Development, Cansight Technology Corporation, Toronto, Canada

O. Adaptive Per-Tree Canopy Segmentation and 3D Reconstruction via Multi-Sensor Fusion in Structured and Unstructured Orchards Ali Abedi, Fernando Cladera, Mohsen Farajijalal, Reza Ehsani Department of Mechanical Engineering, University of California, Merced, California, USA; Department of Computer and Information Science, University of Pennsylvania, Pennsylvania, USA

O. Openness and Adaptability in Cybersecurity: A Hierarchical Approach to Robust Defense
Azad Jalalian, Thomas Kunz
Department of Systems and Computer Engineering,
Carleton University, Ottawa, Canada

The 24th International Conference on Foundations of Computer Science (FCS'25: July 21-24, 2025; Las Vegas, USA) https://american-cse.org/csce2025/conferences-FCS

- O. Counting Nonisomorphic Magic Venn Diagrams
 Anja Remshagen, Jamia Echols
 University of West Georgia, Carrollton, Georgia, USA
- O. Investigating the Use of Quantum Computing and Quantum Machine Learning in Speech Recognition Systems: A Comprehensive Survey of Recent Advancements Paramita Basak Upama, Parama Sridevi, Shoumili Dutta, Soheni Dutta, Amity Ali, Sheikh Iqbal Ahamed Department of Computer Science, Ubicomp Lab, Marquette University, Wisconsin, USA
- O. Real-Time Zero-Day Attack Detection In IoT Networks Using Image-Encoded Traffic and Lightweight CNN Architecture Tai-Ying Chiu, Jiann-Liang Chen, Candra Ahmadi National Taiwan University of Science and Technology, Taipei City, Taiwan
- O. Network-Scale Fault Tolerant Computing A von Neumann Multiprocessor Architecture
 Justin Y. Shi
 College of Science and Technology, Temple University, Philadelphia,
 Pennsylvania, USA;
 SMC Labs, LLC., USA

The 21st International Conference on
Frontiers in Education: Computer Science & Computer Engineering
(FECS'25: July 21-24, 2025; Las Vegas, USA)
https://american-cse.org/csce2025/conferences-FECS

- O. Generating Educational Interactive Fiction Games Using ChatGPT Naoya Akada, Masaki Murata Graduate School of Engineering, Tottori University, Tottori, Japan
- O. BugTor: A Feedback-Driven Static Analysis Tailored for Novice Java Programmers Essa Imhmed, Ivan Sanjaya, George Candal, Brian Pasko, Ludwig Scherer Department of Mathematical Sciences, Eastern New Mexico University, Portales, New Mexico, USA
- O. Tensor Decomposition Optimization for Student Success Prediction Modeling in Hands-on Cybersecurity Exercises
 Julia Scott, Jens Mache, Richard Weiss, Taylor Wolff, Jack Cook
 Lewis & Clark College, Portland, Oregon, USA;
 The Evergreen State College, Olympia, Washington, USA
- O. Pedagogical Barriers to AR and VR Integration in Computing and Engineering Higher Education: A Systematic Review Emmanuel Akwah Kyei, Justice Williams Asare, Emmanuel Freeman, Martin Mabeifam Ujakpa, Israel Edem Agbehadji, Alfred Coleman Faculty of Computing and Information Systems, Ghana Communication Technology University, Accra, Ghana; GO4IR Talent Academy, Pretoria, South Africa; Faculty of Applied Science and Technology, Koforidua Technical University, Koforidua, Ghana; School of Governance, IT and Management, University of KwaZulu Natal, Durban, South Africa; Honorary Research Fellow, Faculty of Accounting and Informatics, Durban University of Technology, Durban, South Africa
- O. Improving Student Persistence by Studying Course Withdrawal Data Varick L. Erickson California State University, East Bay, Hayward, California, USA
- O. The Role of AI in AR and VR for STEM Education: A Systematic Review of Cognitive Learning Outcomes
 Emmanuel Akwah Kyei, Emmanuel Freeman, Martin Mabeifam Ujakpa,
 Justice Williams Asare, Israel Edem Agbehadji, Alfred Coleman,
 and William Leslie Brown-Acquaye
 Faculty of Computing & Information Systems, Ghana Communication Technology
 University, Accra, Ghana;
 GO4IR Talent Academy, Pretoria, South Africa;
 Faculty of Applied Science and Technology, Koforidua Technical University,
 Koforidua, Ghana;
 School of Governance, IT and Management, University of KwaZulu Natal,
 Durban, South Africa;
 Faculty of Accounting and Informatics, Durban University of Technology,
 Durban, South Africa
- O. Understanding User Perceptions of DeepSeek: A Mixed-Methods Sentiment and Thematic Analysis
 Jeehaan Algaraady, Mohammad Mahyoob Albuhairy
 Taiz University, Yemen;
 Taibah University, Saudi Arabia

- O. Analysis of the Correlation Between Education and Social Advancement through Pseudonym Information Combination
 Jinmyung Choi
 Konyang University, Nonsan-si, Chungcheongnam-do, Republic of Korea
- O. Buddy, Not Crutch: Ethical Use of Zero-Shot Prompting with Public LLMs for Software Engineering Technical Interview Preparation Marlon Mejias, Oluwagbeminiyi Johnson, Anthony Mays, Legand Burge, Dale-Marie Wilson University of North Carolina Charlotte, North Carolina, USA; Howard University, Washington, D.C., USA; Morgan Latimer Consulting, California, USA

The 21st International Conference on Grid, Cloud, & Cluster Computing (GCC'25: July 21-24, 2025; Las Vegas, USA) https://american-cse.org/csce2025/conferences-GCC

- O. Safeguarding Critical Data in High-Volume Transaction Processing Cloud Services
 Kazi Asharful Haque, Brajendra Panda
 Computer Science Department, University of North Dakota, Grand Forks,
 North Dakota, USA;
 Electrical Engineering and Computer Science Department,
 University of Arkansas, Fayetteville, Arkansas, USA
- O. On Adaptive Metric-Driven Load Balancing for Specialized Clusters:
 A Case on Using NGINX
 Juhi Malkani, Ramin Moazeni, Melody Moh, Teng-Sheng Moh
 San Jose State University, San Jose, California, USA

The 11th International Conference on Health Informatics & Medical Systems (HIMS'25: July 21-24, 2025; Las Vegas, USA) https://www.himscsce.org/hims25/https://american-cse.org/csce2025/

- O. Artificial Intelligence as an Assistant for Pregnancy Journey Ala Saleh Alluhaidan, Marwan Alluhaidan Princess Nourah bint Abdulrahman University, Saudi Arabia
- O. Heart Attack Prediction Using Machine Learning: A Comparative Model Evaluation Adedeji Olugboja Department of Business and Economics at the School of Business and Information Systems, The City University of New York, York College, Jamaica, New York, USA
- O. Early Prediction of Bladder Cancer Diagnosis Using Structured Claims
 Data and Machine Learning
 Wanting Cui, Joseph Finkelstein
 The University of Utah, Salt Lake City, Utah, USA;
 Columbia University, New York, USA
- O. Early Detection of Interstitial Lung Disease Using Machine Learning and Pre-Diagnostic Clinical Features
 Xingyue Huo, Joseph Finklestein
 The University of Utah, Salt Lake City, Utah, USA
- O. Analyzing Speech Impairments: A Machine Learning Approach to Dysarthria Detection
 Milan Gupta
 Francis Parker High School, San Diego, California, USA
- O. Benchmarking of Sentence Transformers in Text-Based Drug-Drug Interaction Classification
 Kivanc Bayraktar, Ebru Akcapinar Sezer, Begum Mutlu, Suat Ozdemir Department of Computer Engineering, Hacettepe University, Ankara, Turkey; Department of Computer Engineering, Ankara University, Ankara, Turkey
- O. Impact of Adaptation of mHealth Interventions to Enhance Medication Adherence: A Systematic Review Fuhid Alanazi, Meshari Alanazi Faculty of Computer and Information Systems, Islamic University of Madinah, Madinah, Saudi Arabia; Department of Computer Science, College of Sciences, Northern Border University, Arar, Saudi Arabia
- O. From Respiration to Heart Sounds: A Comparative Review of Three Radar Systems for Unobtrusive Monitoring Aref Smiley, Joseph Finkelstein Department of Biomedical Informatics, The University of Utah, Salt Lake City, Utah, USA
- O. Exploring IoT Architecture for Home-Based Physical Telerehabilitation Aref Smiley, Joseph Finkelstein Department of Biomedical Informatics, The University of Utah, SLC, Utah, USA

- O. Benchmarking Classic Machine Learning Models for Diabetes Diagnosis:
 A Performance Evaluation Framework Using Confusion Matrices
 and ROC Analysis
 Roseline Oluwaseun Ogundokun, Pius Adewale Owolawi, Etienne A. van Wyk
 Department of Computer Systems Engineering, Tshwane University of
 Technology, Pretoria, South Africa
- O. Hybrid Stacked and Tuned Ensemble Models for Enhanced Coronary Heart Disease Classification: A Multi-Dataset Study Mustafa Adil Fayez, Safaa Saad Salim, Abdullahi Abdu Ibrahim Department of ECE, Institute of Science, Altinbas University, Istanbul, Turkey
- O. Machine Learning-Based Breathing Phase Classification of Respiratory Sounds for Pulmonary Health Assessment Qingwei Li, Suranjan Panigrahi, Miad Faezipour School of Engineering Technology, Electrical & Computer Engineering Technology, Purdue University, West Lafayette, Indiana, USA
- O. EEG-Based Stress Detection and Personalised Music Recommendation System for Stress Relief Srijit Bhattacharya, Catharine Parmar, Nathan Lee, Mohammad Husain Cal Poly Pomona, Pomona, California, USA
- O. An Explainable Ensemble Learning Framework for Early Diagnosis of Pediatric Genetic Disorders
 Ibtisam Alwethainani, Eman Alqaissi
 Department of Computer Science, King Khalid University, Abha, Saudi Arabia;
 Informatics and Computer Systems, King Khalid University, Abha,
 Saudi Arabia;
 Unit of Technical and Engineering Majors, King Khalid University,
 Abha, Saudi Arabia
- O. Home Physical Telerehabilitation System for Patients with Postural Orthostatic Tachycardia Syndrome
 Joseph Finkelstein, Aref Smiley, Aileen Gabriel,
 Patricia Goncalves Leite Rocco, Xingyue Huo, Katie Johnson, Melissa Cortez University of Arizona College of Medicine, Tucson, Arizona, USA;
 Department of Neurology, University of Utah, Salt Lake City, Utah, USA

The 27th International Conference on Artificial Intelligence (ICAI'25: July 21-24, 2025; Las Vegas, USA) https://american-cse.org/csce2025/conferences-ICAI

- textAuthor, An AI-Based Text-Authorship Classifier Jack K. Horner Indendent Researcher, Lawrence, Kansas, USA
- O. Convolutional Neural Networks for Accurate Medical Clamp Identification in Hospital Settings
 Yerlin Larissa Barahona Garcia, Ariel Isaac Posada Barrera
 Universidad Tecnologica de Honduras, Tegucigalpa, Honduras;
 Universidad Popular Autonoma del Estado de Puebla, Puebla, Mexico
- O. An Intelligent Emotion-based Mechanism to Predicting Domestic Violence in Public Online Posts
 Samer Muthana Sarsam, Ahmed Isam Al-Hatem, Abdul Samad Shibghatullah, Chit Su Mon, Abd Aziz Alias, Lubna A. Hussein
 School of Management, Coventry University, Coventry, UK;
 Al Iraqia University, College of Arts, Baghdad, Iraq;
 College of Computing & Informatics (CCI), Universiti Tenaga Nasional, Kajang, Selangor, Malaysia;
 School of Mathematical and Computer Sciences, Heriot-Watt University Malaysia, Putrajaya, Malaysia;
 Department of Oral and Craniofacial Sciences, Faculty of Dentistry, Universiti Malaya, Kuala Lumpur, Malaysia;
 Centre for Instructional Technology and Multimedia, Universiti Sains Malaysia, Penang, Malaysia
- O. Unveiling Gender Disparities in Neurodegenerative Disease Diagnosis on Microblogs
 Ahmed Isam Al-Hatem, Samer Muthana Sarsam, Abdul Samad Shibghatullah, Chit Su Mon, Abd Aziz Alias, Lubna A. Hussein
 Al Iraqia University, College of Arts, Baghdad, Iraq;
 School of Management, Coventry University, Coventry, UK;
 College of Computing & Informatics (CCI), Universiti Tenaga Nasional, Kajang, Selangor, Malaysia;
 School of Mathematical and Computer Sciences, Heriot-Watt University Malaysia, Putrajaya, Malaysia;
 Department of Oral and Craniofacial Sciences, Faculty of Dentistry, Universiti Malaya, Kuala Lumpur, Malaysia;
 Centre for Instructional Technology and Multimedia, Universiti Sains Malaysia, Penang, Malaysia
- O. Labeling Data Using a Rule-Based Voting Ensemble, Fuzzy Sets, and Fuzzy Clustering
 Pablo Marcillo, Myriam Hernandez-Alvarez
 Departamento de Informatica y Ciencias de la Computacion,
 Facultad de Ingenieria de Sistemas, Ladron de Guevara E11-25 y
 Andalucia, Edificio de Sistemas, Quito, Ecuador
- O. Efficient Real-Time Object Detection Using Deep Neural Networks: A Comparative Analysis on Low-Power Devices
 Byambabat Batkhuyag, Miho Akiyama, Takuya Saito
 Tokyo University of Information Sciences, Onaridai Wakabaku
 Chiba-shi, Chiba, Japan

- O. Preliminary Results of LLM Vulnerability Testing in Less Common Languages James Mardi, Yulia Kumar, Guohao Yang, Dov Kruger, J. Jenny Li Kean University, Union, New Jersey, USA; Rutgers University, Piscataway, New Jersey, USA
- O. A Unified Framework Incorporating AW-TRBAC and Semantic Variational Autoencoders for Dynamic Threat Detection and Access Control Abanisenioluwa K. Orojo, Emmanuelli El-Mahmoud, Shaun Hutton, Michael J. Donahoo, Webster Elumelu Baylor University, Waco, Texas, USA; Webster University, St. Louis, MO, USA
- O. From Data to Insight: Using Support Vector Machines to Identify Key Poverty Determinants
 Anatoli Nachev
 Business Information Systems, School of Business and Economics,
 University of Galway, Ireland
- O. Deep Learning-based Time-Series Prediction of Traffic Speed Using NPMRDS Dataset
 Saeka Rahman, Md Motiur Rahman, Asheka Rahman, Sangho Park, Shuju Wu, and Miad Faezipour
 Electrical & Computer Engineering Technology, School of Engineering Technology, Purdue University, West Lafayette, Indiana, USA;
 Connecticut Department of Transportation, Newington, Connecticut, USA;
 Department of Computer Electronics & Graphics Technology, Central
 Connecticut State University, New Britain, Connecticut, USA
- O. Conversational AI for Healthcare: A Smart Chatbot For Breast Cancer Awareness Taruna Verma, Renu Balyan State University of New York at Old Westbury, New York, USA
- O. A Real-World Dataset of Ingredient Images for Food Computing Mihai Trascau, Florin Dumitrescu, Mihai Nan, Adina Magda Florea National University of Science & Technology, POLITEHNICA Bucharest, Romania
- O. A Scalable Embedding-Based Framework for Sentencing Factor Labeling for Legal Judgments Cheng-Tai Li, Yao-Chung Fan National Chung Hsing University, Taichung, Taiwan
- O. The Geometry of Bias in Contrastive Embeddings: A Spectral Analysis Blessing Ogbuokiri, Hridoy Rahman, David Martin, Kaija Sproxton, Adrien Belcastro, Ray Huang, Vijay Panchal Department of Computer Science, Brock University, Canada
- O. Mamba and Reformer Training on Minute-Level Stock to Compare Sentiment Signals from Top 10 Large Language Models Lokesh Antony Kadiyala, Amir Mirzaeinia University of North Texas, Denton, Texas, USA
- O. Multi-task Parallelism for Robust Pre-training of Graph Foundation Models on Multi-source, Multi-fidelity Atomistic Modeling Data Massimiliano Lupo Pasini, Jong Youl Choi, Pei Zhang, Kshitij Mehta, Rylie Weaver, Ashwin M. Aji, Karl W. Schulz, Jorda Polo, and Prasanna Balaprakash
 Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA;
 Advanced Micro Devices Research, USA

- O. GomoBench: Evaluating LLMs on Software Evolution through Competitive Gomoku AI
 Jiayu Liu, Chenxi Luo, Tiejian Luo
 School of Computer Science and Technology, University of Chinese
 Academy of Sciences, Beijing, China;
 School of Computing, Engineering and Mathematics, La Trobe University,
 Melbourne, VIC, Australia
- O. A Multimodal Multi-Agent Framework for Radiology Report Generation Ziruo Yi, Jinyu Liu, Ting Xiao, Mark V. Albert (Haoxuan Zhang) University of North Texas, Denton, Texas, USA
- O. SensTrans: An AI Model for Generating Wearable Sensor Time-Series Signals to Improve Human Activity Detection
 HyungKyun Kim, Sayma Akther
 San Jose State University, California, USA
- O. Sign Language-Controlled Robot: A Simple and Time-Efficient Approach to Human-Machine Interaction Vassily Lombard Earlham College, Richmond, Indiana, USA
- O. Collaborative Time Series Forecasting Models to Predict Solar Energy Khaoula Saidani, Nejla Essadi, Mongi Besbes Department of Computer Science and Complex Systems, University of Carthage Tunis, Tunisia; Department of Computer Science, University of Carthage Tunis, Tunisia
- O. Towards Smarter IT Compliance Audits: Leveraging Artificial Intelligence Asma Saleh Al Khalili, Abdul Khalique Shaikh Department of Information Systems, Sultan Qaboos University, Muscat, Sultanate of Oman
- O. Modeling the Impact of Partial Shading on Photovoltaic Panels via Large-Scale Simulation and Regression
 Jonathan Olivares, Akshat Desai, Varun Yedavilli, Sachin Lodhi, Robert Cruz, Santiago Monofre, Kevin Huang, Kanika Sood, Jaya Dofe, and Rakeshkumar Mahto
 Department of Electrical and Computer Engineering, California State University, Fullerton, California, USA;
 Department of Computer Science, California State University, Fullerton, California, USA;
 Troy High School, Fullerton, California, USA
 Department of Technology and Engineering, Fullerton College, Fullerton, California, USA;
- O. Augmenting Agricultural Human Capital through Agentic AI: Personalizing Support for Small Farmers in Labor-Scarce Rural and Agri Industry Ecosystems Chandrasekar Vuppalapati, Anitha Ilapakurti, Shruti Vuppalapati, Sharat Kedari, Jaya Vuppalapati, Konduru Rajasri Computer Engineering (CMPE Department), San Jose State University, San Jose, California, USA; Hanumayamma Innovations and Technologies, Inc., Fremont, California, USA; Hanumayamma Innovations and Technologies PVT Limited, Hyderbad, India
- O. Policy Deployment: Process-Centric Adoption as a Key Factor of Success Costas J., Pastor R., Fernandez-Vazquez S., Fernandez I., Puente J. Escuela Politecnica de Ingenieria Gijon, Campus de Viesques s/n, Gijon, Asturias, Spain

O. How to Manage Supply Chain Bill of Materials through Artificial Intelligence?
de Lucia M., Mula J., Silvestre-Cerda J. A., Ferriols F.J., Murino T. Research Centre on Production Management and Engineering (CIGIP), Universitat Politecnica de Valencia, Alarcon, Alcoy, Alicante, Spain

The 21st International Conference on Data Science (ICDATA'25: July 21-24, 2025; Las Vegas, USA)
https://icdatascience.org/
https://american-cse.org/csce2025/

O. Behavioral Analysis via Tabular-to-Image Transformation for Proactive Threat Detection
Ariel Isaac Posada Barrera, Laura Margarita Rodriguez Peralta,
Erick Rosete Beas, Jessica Lizeth Borja Diaz
Universidad Popular Autonoma del Estado de Puebla (UPAEP), Departamento de ingenierias, Facultad de Tecnologias de Informacion y Ciencia de Datos (FTIyCD), Puebla, Mexico;
Universidad Popular Autonoma del Estado de Puebla (UPAEP), Facultad de Tecnologias de Informacion Ciencia de Datos (FTIyCD), Secretaria de Ciencia, Humanidades, Tecnologia e Innovacion (SECIHTI), Puebla, Mexico; Universidad Popular Autonoma del Estado de Puebla (UPAEP), Facultad de Tecnologias de Informacion Ciencia de Datos (FTIyCD), Puebla, Mexico

- O. Utility AI for Explainable Decision-Making in Six-DoF Simulation Environment
 Indu Shukla, Aberahim Salhi, James E. Ross, Gary J. Briggs
 United States Army Corps of Engineers, Vicksburg, Mississippi, USA;
 United States Army Corps of Engineers, RAND Corporation,
 Santa Monica, California, USA
- O. Reinforcement Learning Explainability Using Decision Tree in Combat Environment
 Indu Shukla, Aberahim Salhi, James E. Ross, Gary J. Briggs
 United States Army Corps of Engineers, Vicksburg, Mississippi, USA;
 United States Army Corps of Engineers, RAND Corporation,
 Santa Monica, California, USA
- O. Classification Based on Dynamic Skyline Objects Yoshiaki Okubo Hakodate Campus, Hokkaido University of Education, Japan
- O. Conditional Wasserstein Generative Adversarial Network Transformers with Gradient Penalty (CWGANSFORMER-GP) with Multi-Modal Data Rose Atuah, Khalil Almakrami, Michael McGuire Department of Computer and Information Sciences, Towson University, Baltimore, Maryland, USA
- O. Beyond the Hype: The Efficacy of Simpler Models for Water Level Forecasting Compared to Deep Learning Architectures Edgar Ceh-Varela, Sarbagya Shakya, David Schmith Eastern New Mexico University, New Mexico, USA
- O. Machine Learning-Based Viscosity Prediction of Ionic Liquids Using Random Forest Regression
 Jacob Goodin, Patrick Cuddihy, Fardin Khabaz, Zhong-Hui Duan, En Cheng Department of Computer Science, The University of Akron, Akron, Ohio, USA; School of Polymer Science and Polymer Engineering, The University of Akron, Akron, Ohio, USA
- O. Multistage Stress Classification and Cognitive Capacity Analysis Using EEG Abdul Waleed, Nusrat Jahan Nitu, Carol Fung Concordia University, Montreal, Canada; University of Dhaka, Bangladesh

- O. Towards Efficient Research Article Classification and Recommendation Using NLP and Machine Learning Shadikur Rahman, Hasibul Karim Shanto, Umme Ayman Koana York University, Canada
- O. CPU-Based Parallelization of BDAC: Enhancing k-Clique Approximation Belgin Ergenc Bostanoglu, Busra Calmaz Izmir Institute of Technology, Turkey
- O. DP-WGAN-GP for Privacy Protection in Medical Data Bo Yu, Hao Huang, Yiyu Shan, Guoqiang Zhao, Hemn Barzan Abdalla Wenzhou-Kean University (WKU), Wenzhou, Zhejiang, China; Kean University, New Jersey, USA
- O. Task Scheduling with Various Security Level Requirement in Financial Cloud Environment
 Xianmei Hua, Xinrong Zhan
 School of Artificial Intelligence, Xiamen Institute of Technology,
 Xiamen, China
- O. Validating DataOps CI/CD Pipelines with a Three-Layer Testing Framework Dmytro Valiaiev Computer and Information Sciences, University of Arkansas at Little Rock, Arkansas, USA
- O. Explainable AI for Anomaly Detection in Financial Transactions: A Temporal-Pattern-Based Approach for Regulatory Compliance Bharat Chaturvedi Independent Researcher, USA
- O. Machine and Deep Learning for AI Text Detection
 Li-jing Arthur Chang
 Department of Journalism and Media Studies, Jackson State University,
 Jackson, Mississippi, USA
- O. Kinematic Analysis of Ball Speed in Volleyball Spikes using Pose Estimation and Object Detection
 Deniz (AJ) E. Mergen, S. Ayca Erdogan
 Los Gatos High School, Los Gatos, California, USA;
 San Jose State University, San Jose, California, USA

The 4th International Conference on Emergent Quantum Technologies (ICEQT'25: July 21-24, 2025; Las Vegas, USA) https://qmexico.org/ICEQT2025/https://american-cse.org/csce2025/

O. Quamtum Approximate Optimization Algorithm: Applications, Limitations and Enhancement
Pablo Herrero-Gomez, Carmen Garcia Barcelo, David Gil-Mendez, and Higinio Mora Mora
Computer Tecnology & Computation Department, University of Alicante, Spain

The 26th International Conference on Internet Computing & IoT (ICOMP'25: July 21-24, 2025; Las Vegas, USA) https://american-cse.org/csce2025/conferences-ICOMP

- O. A Comparative Approach Between NB-IoT and Sigfox: Application on the Design of a Battery-Powered Data Logger for Sewage Systems Marcos Martinez-Peiro, Ruben Torres-Curado, Julio Gomis-Tena Dolz Universitat Politecnica de Valencia, Spain
- O. Design and Verification of a CanSat Rover Remote Control System Using Cloud and MQTT Communication Seiya Yoshida, Miho Akiyama, Takuya Saito Tokyo University of Information Sciences, Onaridai Wakabaku Chiba-shi, Chiba, Japan
- O. SLO-FEI: A Novel Secure and Lightweight Offloading Approach for Fog-Edge Federation-Based IoT Yashar Salami Department of Information Security Technology, School of Applied Sciences, Cappadocia University, Nevsehir, Turkiye
- O. Societal Impact of Technology on Wellbeing and Cohesion Rotimi-Williams Bello, Pius Owolawi, Etienne A. van Wyk, Chunling Tu Department of Computer Systems Engineering, Faculty of Information and Communication Technology, Tshwane University of Technology, South Africa
- O. A Systematic Literature Review on Secure Extraction of Multiple Features for Privacy Protection in Wearable Medical Devices
 Kwame Bell-Dzide, Lempogo Forgor, Martin Mabeifam Ujakpa, Stephen Asunka, Hillary Kwame Ofori, Emmanuel Akwah Kyei, Justice Williams Asare Faculty of Computing and Information Systems, Ghana Communication Technology University, Accra, Ghana; School of Governance, IT and Management, University of KwaZulu Natal, Durban, South Africa; Faculty of Applied Science and Technology, Koforidua Technical University, Koforidua, Ghana
- O. Efficient Non-Linear Primitives for Secure Multi-Party Computation among IoT Devices
 Zhaohong Wang, Jing Guo
 EECE, California State University, Chico, California, USA;
 MATH, California State University, Chico, California, USA

The 24th International Conference on Wireless Networks (ICWN'25: July 21-24, 2025; Las Vegas, USA) https://american-cse.org/csce2025/conferences-ICWN

O. Assessment and Examination of Electromagnetic Radiation at DVB-T Broadcast Sites of the Greek Public Broadcasting Corporation Konstantinos Zarkadas, George Dimitrakopoulos Department of Informatics & Telematics, Harokopio University of Athens, Athens, Greece

The 24th International Conference on Information & Knowledge Engineering (IKE'25: July 21-24, 2025; Las Vegas, USA) https://american-cse.org/csce2025/conferences-IKE

- O. Secure Password Management System (SPMS) using One-Time Pad (OTP)
 Aysha Almarzooqi, Maryam Al Ali, Meera Alhammadi, Abdulrahman Al Shehhi,
 Joseph Anajemba, Nedal Ababneh
 Abu Dhabi Polytechnic, United Arab Emirates (UAE)
- O. A Quality-Focused Performance Evaluation of SQL over Large Language Models Marlene Goncalves, Daniel Robayo, Graciela Perera Valencian International University, Valencia, Spain; Universidad Simon Bolivar, Caracas, Venezuela; Northeastern Illinois University, Illinois, USA
- O. Multi-LLM Record Linkage: A Comparative Analysis Framework for Co-Residence Pattern Discovery
 Muzakkiruddin Ahmed Mohammed, John R. Talburt, Aatif Muhammad Althaf, and Mariofanna Milanova
 University of Arkansas at Little Rock, Little Rock, Arkansas, USA
- O. Ontology Driven Fake News Detection for Post Disaster Management Zuhrah Mohammed, Elena Panchoo, Jahnvi Sooknanan, Diana Ragbir-Shripat, Amit Neil Ramkissoon, Vijayanandh Rajamanickam Department of Computing & Information Technology, The University of the West Indies at St. Augustine, Trinidad & Tobago
- O. Multilingual Customer Record Linkage: A Novel Approach Using LLMs for Cross-Lingual Entity Resolution
 Muzakkiruddin Ahmed Mohammed, Shames Al Mandalawi, Hendrika Maclean, and John R. Talburt
 Donaghey College of Science, Technology, Engineering, and Mathematics, The University of Arkansas at Little Rock, Little Rock, Arkansas, USA

The 29th International Conference on Image Processing, Computer Vision, & Pattern Recognition (IPCV'25: July 21-24, 2025; Las Vegas, USA) https://american-cse.org/csce2025/conferences-IPCV

- O. A Real-Time Robotic Battery Sorting System Based on Contrastive Learning Maxwell Hwang, Kao-Shing Hwang School of Microelectronics, Northwestern Polytechnical University, Xi'an, China; Department of Electrical Engineering, National Sun Yat-sen University, Taiwan
- O. Comparing Human Fall Detection Algorithms of Millimeter-Wave Radar Among MobileViT, RepLKNet and tinyViT Networks
 Kai Lu, Heng Zheng, Xiangqun Zhang, Genyuan Du, Zhizhou Ge, Chenxi Zhao Xuchang University, Weidu District, Xuchang, Henan, China;
 Henan Institute of Science and Technology, Hongqi District, Xinxiang, Henan, China;
 Henan International Joint Laboratory of Polarization Sensing and Intelligent Signal Processing, Weidu District, Xuchang, Henan, China
- O. Deep Learning-Based Automatic Segmentation of 3D Medical Images Sithembiso Ntanzi, Serestina Viriri University of KwaZulu-Natal, South Africa
- O. Efficient Segment Anything Model for Medical Image Analysis Yurvan Ramjan, Serestina Viriri University of KwaZulu-Natal, South Africa
- O. Energy-Based Models for Open-Set Active Learning Zongyao Lyu, William J. Beksi University of Texas at Arlington, Texas, USA
- O. Smart Computer Vision System Based on Multi-Class Informed Object Detection Using YOLOv7 and ResNet-18
 Abdulghani M. Abdulghani, Mokhles M. Abdulghani, Wilbur L. Walters, and Khalid H. Abed
 Department of Electrical & Computer Engineering and Computer Science, Jackson State University (JSU), Jackson, Mississippi, USA
- O. Multi-Classification for Specifying the Gender for Adults and Children Using the Resnet-18 Architecture
 Abdulghani M. Abdulghani, Mokhles M. Abdulghani, Wilbur L. Walters, and Khalid H. Abed
 Department of Electrical & Computer Engineering and Computer Science, Jackson State University (JSU), Jackson, Mississippi, USA
- O. Low-light Video Enhancement Using Attention-based Deep Neural Networks Hong-Xiang Wang, Jin-Jang Leou National Chung Cheng University, Chiayi, Taiwan, ROC
- O. Optical Flow Estimation Using Transformer-based Deep Neural Networks Kai-Hsiang Liang, Jin-Jang Leou National Chung Cheng University, Chiayi, Taiwan, ROC
- O. Appearance-Based Gaze Estimation with Deep Learning for Interactive Digital Signage Daniel Miller, Byeong Kil Lee Electrical and Computer Engineering, University of Colorado, Colorado Springs, Colorado, USA

- O. Advanced Anomaly Detection in PV Solar Cells: Leveraging Vision Transformers (ViT) and Machine Learning for Enhanced Fault Diagnosis Mohamed R. Shoaib, Jun Zhao College of Computing and Data Science (CCDS), Nanyang Technological University (NTU), Singapore
- O. Enhancing Time Series Clustering and Classification via Order-Preserving Wasserstein Distance, Local Fourier Approximations, and Ensemble Learning Fanqi Meng, Sonja Greven, Maria Osipenko Humboldt-Universitat zu Berlin, Unter den Linden, Berlin, Germany; Hochschule fur Wirtschaft und Recht Berlin, Badensche Str. Berlin, Germany
- O. Smart Computer Vision System for Real-Time Monitoring of Car Parking Duration Using YOLOv7 and Deepsort
 Abdulghani M. Abdulghani, Mokhles M. Abdulghani, Wilbur L. Walters, and Khalid H. Abed
 Department of Electrical & Computer Engineering and Computer Science, Jackson State University (JSU), Jackson, Mississippi, USA
- O. Near Real-Time Dust Aerosol Detection with 3D Convolutional Neural Networks on MODIS Data Caleb Gates, Patrick Moorhead, Jayden Ferguson, Omar Darwish, Conner Stallman, Pablo Rivas, Paapa Quansah Department of Computer Science, Baylor University, Waco, Texas, USA; Department of Electrical & Computer Engineering, Baylor University, Waco, Texas, USA
- O. Deep Learning Approach for Detection of Facial Emotional Recognition Emmanuel Akwah Kyei, Peter Appiahene, Obed Appiah, Justice Williams Asare, Martin Mabeifam Ujakpa, Emmanuel Freeman, William Leslie Brown-Acquaye Faculty of Computing and Information Systems, Ghana Communication Technology University, Accra, Ghana; Department of Information Technology and Decision Sciences, University of Energy and Natural Resources, Sunyani, Ghana; Department of Computer Science and Informatics, University of Energy and Natural Resources, Sunyani, Ghana; Faculty of Applied Science and Technology, Koforidua Technical University, Koforidua, Ghana; School of Management, IT and Governance, University of KwaZulu-Natal, Durban, Kwazulu-Natal, South Africa
- O. Vision: A Deep Hybrid Architecture for Real-Time Face Recognition in Automated Attendance Systems
 Prachi Dave, Samarth Borade, Archana Bhise
 SVKM's NMIMS Mukesh Patel School of Technology Management and
 Engineering, Mumbai, India
- O. R-C-P Method: An Autonomous Volume Calculation Method Using Image Processing and Machine Vision
 MA Muktadir, Sydney Parker, Sun Yi
 Department of Mechanical Engineering, North Carolina A&T State
 University, Greensboro, North Carolina, USA
- O. Computation-Efficient Hierarchical Tensor Train Convolutional Architectures for Diffusion-Based Medical Image Segmentation Yunduan Lou, Yifeng Yu, Shangping Ren, Yu Bai California State University Fullerton, Fullerton, California, USA; University of California, Irvine, Irvine, California, USA; San Diego State University, San Diego, California, USA

The 22nd International Conference on Modeling, Simulation & Visualization Methods (MSV'25: July 21-24, 2025; Las Vegas, USA) https://american-cse.org/csce2025/conferences-MSV

- O. Manufacturing Process Improvement using Discrete Events Simulation Abdu Shaalan, David Baglee, Ben Hartop University of Sunderland, Sunderland, UK
- O. A Method for Detecting Changes in the Thermal Losses of a Parabolic Trough Collector
 Pedro J. Zufiria, Angela Castillo, Alberto Portal, Francisco M. Marquez, and Luis J. Yebra
 Depto. Matematica Aplicada a las TIC, ETSI Telecomunicacion,
 Information Processing and Telecommunications Center, Universidad
 Politecnica de Madrid, Madrid, Spain;
 Departamento de Automatica, Universidad de Alcala (UAH),
 Alcala de Henares, Spain;
 Plataforma Solar de Almeria, CIEMAT, Tabernas, Spain
- O. Implementation of a Digital Twin for the TCP-100 Parabolic Trough Collector Research Facility
 Francisco M. Marquez, Luis J. Yebra, Pedro J. Zufiria, and Francisco Gomez Medina
 Departamento de Automatica, Universidad de Alcala (UAH),
 Alcala de Henares, Spain;
 Plataforma Solar de Almeria, CIEMAT, Tabernas, Spain;
 Depto. Matematica Aplicada a las TIC, ETSI Telecomunicacion,
 Information Processing and Telecommunications Center, Universidad Politecnica de Madrid, Av. Complutense, Madrid, Spain;
 The Alan Turing Institute, British Library, London, England, UK
- O. Experiment Evaluation-Testing and Validation of a Bio-Inspired Probabilistic Graphical Model for Root Cause Detection in an e-Commerce Application Kapila Molri, Majid Shaalan CISC Department, Harrisburg University of Science and Technology, PA, USA
- O. Simulation-Based Problem Solving: Enhancing Productivity and Decision-Making Across Diverse Real-World Applications Bahram Asiabanpour Ingram School of Engineering, Texas State University, San Marcos, Texas, USA

The 31st International Conference on
Parallel & Distributed Processing Techniques & Applications
(PDPTA'25: July 21-24, 2025; Las Vegas, USA)
https://american-cse.org/csce2025/conferences-PDPTA

- O. MQSimNet: An Open-Source Simulator for Network-Based SSDs
 Amir Mirzaei, Fatemeh Serajeh Hassani, Atiyeh Gheibi-Fetrat, Mina Zabihi,
 Sina Ghorbani-Jabbehdar, Mahmoud Reza Kheyrati-Fard, Ahmad Javadi Nezhad,
 Seyed Mohammad Hosseini, Ahmad Javadi Nezhad, Negar Akbarzadeh,
 Arash Tavakkol, Jeong-A Lee, Hamid Sarbazi-Azad
 Sharif University of Technology, Iran;
 ApplyBoard, Inc, Kitchener, Kitchener, Canada;
 Institute for Research in Fundamental Sciences (IPM), Iran;
 Chosun University, Gwangju, Gwangju, South Korea
- O. Design and Evaluation of a Cost-Aware Dynamic Load Balancer for Distributed Environments
 Satish Penmatsa, Krishna Kanth Varma P
 Department of Computer Science, Framingham State University,
 Framingham, MA, USA;
 Department of Electronics & Communication Engineering,
 SRKR Engineering College, AP, India
- O. Quantifying HPC Productivity: A Comprehensive Evaluation of High-Level Programming Abstractions versus MPI in Parallel Computing Applications Arne Hendricks

 Department of Computer Science, Friedrich Alexander University, Erlangen, Germany

The 24th International Conference on Security & Management (SAM'25: July 21-24, 2025; Las Vegas, USA) http://sam.udmercy.edu/sam25/ https://american-cse.org/csce2025/

- O. Dynamic ARP Cache Poisoning Detection and Enhanced Prevention in Virtual Networks Using SDN and Real-Time Traffic Analysis with Scapy Ala'a Alsheikh Ali, Ken McGarry, David Baglee, Neil Eliot School of Computer Science, Faculty of Technology, University of Sunderland, UK; School of Engineering, Faculty of Technology, University of Sunderland, UK
- O. Rethinking Privacy Laws for Subscriptions: A Consumer Harm Perspective Elena Nye, Kambiz Ghazinour, Mehdi Ghayoumi Department of Cybersecurity, State University of New York at Canton, New York, USA
- O. Composing Cyberattacks: Sequential Composition with Communication Ke'Asia Fearn, Katia Maxwell Athens State University, Athens, Alabama, USA
- O. Enhancing IT Competitiveness for Adaptive Strategy and Threat Response Suaad Al Fahdi, Zainab Al-Abri, Abdul Khalique Shaikh Department of Information Systems, Sultan Qaboos University, Muscat, Oman
- O. AI-Driven Deepfakes: Exploring Exploitation Risks and Cybersecurity Responses Brianna Geiger, Mei Li, Anjali Desai, Rui Zhu, Huirong Fu Oakland University, USA; Kettering University, USA
- O. Assessing the Impact of Access Control Policies on Data Accessibility in Distributed NoSQL Environments
 Abanisenioluwa Orojo, Emmanuelli El-Mahmoud, Greg Speegle
 Baylor University, Waco, Texas, USA
- O. Transparency and Security in Electronic Voting through Blockchain - A Case Study Wilson Mauro Rojas Reales, Kevin Daniel Pinzon Castillo, Sergio Sanabria Garcia, Armando Ricardo Medina Nieto, and Christian Felipe Duarte Arevalo El Bosque University, Colombia
- O. 3Body Problem: Can it be used for Cryptographically Secure Pseudorandom Number Generator (CSPRNG)?

 Lara Su Ertaul

 Columbia University, USA
- O. A Study on Integrated Framework for Copyright Protection based on Multi-Signature in NFT
 Hye-Young Kim
 School of Games, Hongik University, South Korea

- O. The Human Factor in Cybersecurity: A Conceptual Model Integrating Cognitive Biases
 Roberto Andrade, Maria Cazares, Daniela Cordova-Pintado
 Universidad San Francisco de Quito, Colegio Politecnico, Quito, Ecuador;
 Universidad de Lusofona, Lisboa, Portugal;
 Departament d'Enginyeria de la Informacio i de les Comunicacions,
 Universitat Autonoma de Barcelona UAB Barcelona, Spain
- O. Machine Learning-Based Framework for Cyberattack Analysis and Detection in Smart Grids
 Mais Nijim, Viswas Kanumuri, Waseem Al-Aqqad, Hisham Al-Bataineh,
 Ayush Goyal, David Hicks, George Toscano
 Department of Electrical Engineering and Computer Science,
 Texas A&M University Kingsville, Kingsville, Texas, USA;
 Department of Electrical and Computer Engineering, West Virginia
 University, Morgantown, West Virginia, USA;
 Department of Physics and Geosciences, Texas A&M University Kingsville,
 Kingsville, Texas, USA
- O. Exploring Phishing Awareness Across UTech Jamaica: A Comparative Study of Student Awareness Across Faculties
 Tanya Graham, Jevon Loton, Jameilia Jones, Sewayne Pearson,
 Spencer Darlington, Bradley Miller
 School of Computing and Information Technology,
 University of Technology, Jamaica

The 23rd International Conference on Software Engineering Research & Practice (SERP'25: July 21-24, 2025; Las Vegas, USA) https://american-cse.org/csce2025/conferences-SERP

- O. An Innovative Framework for Automated Functional and User Interface Testing in Mobile Applications
 Ishaya Gambo, Solagbade Enitilo, Olumide Oluyide, Michael Peter, Christopher Agbonkhese, Rhodes Massenon, Amos Adeboye Igbinyemi Department of Software Engineering, Obafemi Awolowo University, Ile-Ife, Nigeria;
 Doyenify OU, Juhan Sutiste tee, Tallinn, Estonia;
 Axa Mansard Investment Limited, Mansard Place, Lagos, Nigeria;
 Department of Digital and Computational Studies, Bates College, Lewiston, ME, USA
- O. Remaining Agile with Hybrid Work Models Mierhamza Rahimi, Catherine Stringfellow Midwestern State University, Wichita Falls, Texas, USA
- O. Generative AI for Software Engineering: Generative AI Effectiveness and Efficiency in Software Development Documentation Kadir Alpaslan Demir, Rohith Gadamsethy Department of Computer Science, Texas A&M University-Corpus Christi, Corpus Christi, Texas, USA

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