SERA 2026/ICIS 2026 Joint Conference Program

(Last Updated: May 27, 2026, 00:21 AM)

24th International Conference on
Software Engineering Research, Management and Applications
(SERA 2026)

and

27th International Conference on
Computer and Information Science
(ICIS 2026)

May 27-29, 2026, Towson University
Science Complex Building
https://acisinternational.org/conferences/sera-2026/

Conference Organizing Committee Members

SERA 2026

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Special Session Co-Chairs
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Finance Chair:
Roger Y Lee, Central Michigan University, USA

Program at a Glance

Venue: Science Complex Building

Day 1 - Wednesday, May 27, 2026

Time (PST)	Activity	Concurrent Sessions		
		Room 1 -SC2123 **SERA 2026**	**Room 2** - SC2125 **SERA 2026**	**Room 3** - SC2133 **ICIS 2026**
8:00 ~10:30 AM	Registration			
9:00 ~ 9:20 AM	Opening	Dr. Yeong-Tae Song, Professor, Computer & Information Science Towson University		
9:20 ~ 9:30 AM	Welcome Remarks	Dr. Matthew Nugent Professor and Dean, College of Science & Mathematics Towson University		
9:30 ~ 10:30 AM	Keynote I	Dr. Tokuro Matsuo, Professor, School of Medicine, Fujita Health University, Japan "Social AI for Human Consensus Formation."		
10:30 ~11:00 AM	Coffee Break			
11:00 – 12:00 PM	Keynote II	Dr. Simon Xu, Interim Dean and Professor Algoma University, Canada "Supporting S/W Evolution - Intelligent Concept Location."		
12:00 – 2:00 PM	Luncheon (on your own)			
2:00 – 3:20 PM	Sessions	A1: Special Session Applied AI, & Data Analytics	B1: Computer Vision & Medical Imaging	C1: SS1 - Business Management
3:20 - 3:50 PM	Coffee Break			
3:50 – 5:10 PM	Sessions	A2: Cybersecurity & Security Systems	B2: Healthcare & Biomedical AI	C2: Healthcare AI / Biomedical Analytics
6:00 - 8:00 PM	Dinner Banquet at West Village, 4th floor			

※ Zoom Links (Day 1)
Opening https://towson-edu.zoom.us/j/96772203517?pwd=saH7cbCKcmoxSzAtroS00vdmCzSQhB.1
Room1 https://towson-edu.zoom.us/j/96772203517?pwd=saH7cbCKcmoxSzAtroS00vdmCzSQhB.1
Room2 https://towson-edu.zoom.us/j/91090481806?pwd=xJ848puLX1GaTQKry4gYOBjv3rLvKF.1
Room3 https://towson-edu.zoom.us/j/98444034152?pwd=RoCvTsPqbc00VUX4F8CY7l1QCluGsQ.1

Day 2 - Thursday, May 28, 2026

Venue: Science Complex Building

Time (PST)	Activity	Concurrent Sessions		
		Room 1 -SC2123 **SERA 2026**	**Room 2** - SC2125 **SERA 2026**	**Room 3** - SC2133 **ICIS 2026**
8:00 –10:30 AM	Registration			
9:00 – 10:30 AM	Sessions	A3: LLMs, AI Agents & Trustworthy AI	B3: Software Engineering & Code Intelligence	C3: LLM / Responsible AI / Education
10:30 – 11:00 AM	Coffee Break / Posters			
11:00 – 12:30 PM	Sessions	A4: Machine Learning Models & Architectures	B4: Data Systems & Infrastructure	C4: SS2 - Data Science and IT Systems(Online)
12:30 – 2:30 PM	Luncheon (on your own)			
2:00 – 3:20 PM	Sessions	A5:Human-Centered AI & Social Analysis	B5 : NLP & Language Processing	C5: Quantum / Optimization / Emerging Methods
3:20 - 3:50 PM	Coffee Break			
3:50 – 5:30 PM	Sessions	A6 : Education & Learning Technologies	B6: S.E Intelligent Systems & Applied AI	C6: B1: Security / Privacy / Networks

※ Zoom Links(Day 2)
Room1 https://towson-edu.zoom.us/j/96772203517?pwd=saH7cbCKcmoxSzAtroS00vdmCzSQhB.1
Room2 https://towson-edu.zoom.us/j/91090481806?pwd=xJ848puLX1GaTQKry4gYOBjv3rLvKF.1
Room3 https://towson-edu.zoom.us/j/98444034152?pwd=RoCvTsPqbc00VUX4F8CY7l1QCluGsQ.1

Day 3 - Friday, May 29, 2026

Venue: Science Complex Building

Time (PST)	Activity	Concurrent Sessions		
		Room 1 -SC2123 **SERA 2026**	**Room 2 -** SC2125 **SERA 2026**	**Room 3 -** SC2133 **ICIS 2026**
9:10 – 10:30 AM	Sessions	A7 : Robotics, Systems & Applied AI	B7: AI Safety, Trustworthiness & Robustness	C7: SS3 - Information, Systems, and Humans (Online)
10:30 – 11:00 AM	Coffee Break			
11:00 – 12:20 PM	Sessions	A8 : Scientific & Environmental AI	B8: Explainable AI and Safety Systems	C8: B2 Vision / Multimodal / Affective AI
12:30 – 12:40 PM	Closing Remark			
1:00 - 5:00 PM	Conference Organization Committee Meeting (This event is only for conference organizers)			

※ Zoom Links(Day 3)

Room1 https://towson-edu.zoom.us/j/96772203517?pwd=saH7cbCKcmoxSzAtroS00vdmCzSQhB.1
Room2 https://towson-edu.zoom.us/j/91090481806?pwd=xJ848puLX1GaTQKry4gYOBjv3rLvKF.1
Room3 https://towson-edu.zoom.us/j/98444034152?pwd=RoCvTsPqbc00VUX4F8CY7l1QCluGsQ.1

Keynote I

Social AI for Human Consensus Formation

Dr. Tokuro Matsuo

Professor, School of Medicine, Fujita Health University, Japan

Abstract

Nowadays, a lot of types of AI system to make effective activities among people, organization, and society are provided. However, the underlying technologies of artificial intelligence are not easily applied to real-world systems. This is because there are numerous variables involved, and we have not only failed to organize them but also failed to grasp their true nature. In this lecture, we will focus on the practical applications of artificial intelligence in specific research phases and its utilization in society. In the next decade, we can forecast a lot of types of consensus formation systems are provided and we may find new communication systems integrating between cyber and physical environment. In this talk, I introduce our conducted experiments using cyber-physical discussion environment in the panel discussion session in the conference. In the session, facilitator asks question to panelists about issues on the discussion and attendees can also do as well by their voice. Each attendee also can post and declare his/her opinions and suggestions through the online discussion system during the session. One or two facilitators facilitate the discussion in the online system as well as real discussion. We found out a lot of interesting results of surveys from attendees taken in before/after the experiments. I also introduce the environment to provide useful information for attendees by the digital signage system in the conference venue. This digital signage system is connected to the attendee's location capture system and conference registration system. These integrations between cyber and physical environments and data enable to make better consensus formation between all sorts of people.

Biography

Dr. Tokuro Matsuo is currently Professor at School of Medicine, Fujita Health University, Japan. Also, he is currently Visiting Professor at Sam Houston State University, USA; Executive Director of International Institute of Applied Informatics (IIAI); Executive Director of International Accreditation Association for Higher Education; Guest Professor at Bina Nusantara University, Indonesia; Japan MICE Ambassador; and Kumamoto City MICE Ambassador. He was Professor at Advanced Institute of Industrial Technology (AIIT) in Tokyo Public University Corporation, Japan and Director of Research Center for Artificial Intelligence and Service Science at AIIT (2012- 2026); Associate Professor at Yamagata University, Japan (2006-2012); Adjunct Professor at Asian University, Taiwan (2019-2021); Invited Professor at City University of Macau, Macau (2018-2020); Visiting Researcher at University of Nevada, Las Vegas, USA (2016-2017); Vice-President, International Association for Computer and Information Science, USA (2015-2017); Vice-President, Software Engineering Research Foundation, USA (2013- 2018); Visiting Researcher at University of California at Irvine, USA (2010-2011); Research Fellow at Shanghai University, China (2010-2013); and Project Professor of Green Computing Research Center at

Nagoya Institute of Technology, Japan (2011-2014); Guest Professor at Nagoya Institute of Technology, Japan (2021-2023); and Research Fellow of SEITI in Central Michigan University, USA (2010-2018). He received his Ph.D. in computer science from Nagoya Institute of Technology in 2006. His current research interests include agent-based electronic commerce, qualitative reasoning and simulation, material informatics, IT and business management, and IoT. Also, he is a professional event planner and event producer. He delivered over 250 keynotes and invited talk at international conferences, symposia, and seminars. He also received over 10 awards on research and over 30 research grants from government, research foundations, and company. He has ever presented over 300 reviewed papers in journals and in international conference including top/high-ranked international journals and conferences, such as, SN Applied Sciences, Data in Brief, Marine Systems & Ocean Technology, International Journal of Neural Systems, International Journal of Business Information Systems, Logic Journal of IGPL, IEEE Access, Heliyon, Applied Artificial Intelligence, Emerging Science Journal, AAAI, IEEE CEC, AAMAS, IEEE WCCI, and WWW. Also, he has published 14 edited books from Springer, IGI-Global, and WIT Press. He has been over 90 international conference organizing chairs (conference chair/ program chair / finance chair / publication chair) of IEEE PRIWEC(2006), IEEE/ACIS SNPD (2009 2012, 2013, 2014, 2015, 2017, 2018, 2019), PRIMA (2009, 2020, 2024, 2026), PRICAI (2024), IEEE/ACIS ICIS (2010, 2013, 2015, 2016), IIAI AAI (2012-2026), AAMAS (2013), IEEE/ACIS SERA (2014, 2015), IEEE SOCA (2014, 2017), IEEE TENSYMP (2016), IEEE International Conference on Agentic AI (2016, 2017, 2023, 2026), IEEE SC2 (2017), ASEAN-AI (2018), and other 50 international conferences and workshops.

Keynote II

Supporting Software Evolution through Intelligent Concept location

Dr. Simon Xu, Ph.D.
Interim Dean and Professor
Faculty of Computer Science and Technology

Email: simon.xu@algomau.ca

Abstract

Software systems continuously evolve to accommodate changing requirements, new technologies, and maintenance demands. A fundamental challenge in software evolution is concept location, which is the process of identifying source code elements relevant to a change request, feature enhancement, bug fix, or maintenance task. Because software knowledge is often distributed across large and complex codebases, concept location can be time-consuming, cognitively demanding, and costly when performed manually. This keynote will examine concept location as a critical activity in software maintenance and evolution, and present major advances in automating and supporting this process through static, dynamic, and hybrid approaches. Techniques such as information retrieval, execution-based analysis, program dependency analysis, and machine learning-assisted methods will be discussed, along with their roles in improving change impact analysis, feature location, program comprehension, and software quality. In addition, the keynote will address emerging challenges posed by large-scale systems, AI-assisted development environments, and evolving software architectures, and outline promising future research directions in intelligent support for software evolution.

Biography

Dr. Simon Xu is the Interim Dean and Professor in the Faculty of Computer Science and Technology at Algoma University, where he has been a faculty member since 2002. Prior to his tenure at Algoma University, he was working in the School of Computer Science of University of Windsor, Canada. Additionally, he serves as a guest professor at Wuhan University and the adjunct professor at China University of Mining and Technology, China. Dr. Xu earned his Ph.D. degrees from Wayne State University, in the United States, and the University of Liege in Belgium. His research focuses on software evolution, program comprehension, big data, and cognitive process during software development. Dr. Xu has published more than 90 articles in referred journals and conference proceedings and a few authored/co-authored books. He has chaired seven IEEE international conferences and has been invited to deliver keynotes at various IEEE conferences. He is a senior member of IEEE and a member of ACM.

Technical Session Details

Day 1 - Wednesday, May 27, 2026

A1 : Applied AI, Multimodal Learning & Data Analytics (2:00 ~ 3:20 PM EST, Room 1)
Chair: Subhajit Chakrabarty <Subhajit.Chakrabarty@lsus.edu>, Louisiana State University Shreveport

#29: Leveraging Social Media and Large Language Models for COVID-19 Forecasting [Online]
Yang Liu, Hong Liu, Joshua Tyler Cochran

#63: Supervised Source Separation and Multimodal Fusion of Heart–Lung Sounds [Online]
Lord Coffie, Mary Afrane, Jongyeop Kim, Lei Chen

#93: Distributed Secret Protection in Cloud Storage: A Threshold-Based Approach for Nextcloud
Joseph Harvey, Donghoon Kim

#100: A Twi–English Maternal Health Language Model: Domain Adaptation, Instruction Tuning, and Code-Mixed Evaluation [Online]
Lord Coffie, Jongyeop Kim

#71: Window-Aware Clustering of Cryptocurrency Price Dynamics
Seonghyeon Kim, Hayden Wimmer, Jongyeop Kim

B1: Computer Vision & Medical Imaging (2:00 ~ 3:20 PM EST, Room 2)
Chair: Jongyeop Kim <jongyeopkim@georgiasouthern.edu>, Georgia Southern University

#06**:** XAI with Convolutional Neural Network for Detecting Nail Disease
Mian Qian, Cheng Qian, Hengshuo Liang, Chao Lu, Wei Yu

#76: SEED-Net: Spectral-Embedded Efficient Detection Network for Cross-Domain Face Forgery Detection
Xuecen Zhang, Biyao Zhang, Vipin Chaudhary

#111:TumorVisNet: A Hybrid CNN+ViT Model for Enhanced Brain Tumor Segmentation
Almustapha Wakili, Kamorudeen Amuda, Tayyab Ali, Lei Zhang, Woosub Jung

#134: Automated Glaucoma Detection from Retinal Fundus Images Using Ensemble Deep Learning
Muhammad Adam, Vivian Ihekoronye , and Qingqing Li

#37: dversarial Robustness Evaluation of 3D U-Net–Based Radiation Therapy Dose Prediction Using Clinical DVH Metrics [Online]
Rahim Chowdhury, Neil Tripathi, Lei Ren, Amit Sawant, Birjoo Vaishnav, Weixian Liao

C1: Special Session 1: Application of Computer and Information Science for Business Management (2:00 ~ 3:20 PM EST, Room 3) - Online

Chair: Yukihiro Shintani <yukihiro.shintani@p.chibakoudai.jp>, Chiba Institute of Technology
Multimodal AI-based Traffic Accident Risk Prediction at Uncontrolled Intersections: A Comparative Study of Generalizability Across Different Urban Structures
Kosuke Higuchi, Hiroya Kawahara, Daisuke Miyazaki, Toru Takagi, Akira Tomita, Yukihiro Shintani

A Study on the Impact of AI on Work Efficiency in Creative Fields : Evidence from Brainstorming and Affinity Diagramming
Hideki Goromaru, Minato Ozawa, Hayato Koshiishi

Quantum Optimization of Complex Relief Networks: Addressing Multi-Link Connectivity and Road Vulnerabilities in Japan's Wide-Area Flood Zones
Kanaka Balasubramanian, Motoi Iwashita, Rengalakshmi Balasubramanian

Toward Search–Evaluation Co-Design in Shogi AI: Insights from Hybrid CNN–GNN Evaluation and GPU-Based Alpha-Beta Search
Yuma Kawachi, Yukihiro Shintani

Development and Preliminary Functional Verification of a Digital Marketing Customer Information Collection System Using an AI Chatbot
Kushal Sunuwar, Sayaka Oura, Takato Fukutomi, Kazuki Tomiyama, Yukihiro Shintani, Toru Takagi

A2: Cybersecurity & Security Systems (3:50 ~ 5:10 PM EST, Room 1)
Chair: Donghoon Kim <dhkim@astate.edu> Arkansas State University

#01: Enhancing Security in IoMT Healthcare Systems via AI-Based Intrusion Detection
Glorie Ofoche, Vivian Ihekoronye, Lin Deng, Guobin Xu, Wei Yu

#11: Cybersecurity for Internet of Medical Vehicles (IOMV): Mitigation Attacks and Protecting Data Infrastructures
Babajide Asaju, Kamorudeen Amuda, Almustapha A. Wakili, Rahanatu Suleiman, Woosub Jung

#34: CyberRec: AI-Powered Hybrid Text and Knowledge Graph Recommender for Vulnerability Discovery
Michael Funskin, Abolaji Odunjo, Nam Nguyen, Subrata Acharya

#107: SCFM-FedRL: A Secure and Drift-Aware Federated Learning Framework for Android Malware Detection [Online]
Shikha Arya, Sateesh K. Peddoju

#112: Security of IT/OT Convergence: Design and Implementation Challenges [Online]
Bassam Zahran, Adamu Hussaini, Aisha Ali-Gombe

B2: Healthcare & Biomedical AI(3:50 ~ 5:10 PM EST, Room 2)
Chair: Mian Qian <MQIAN@uscupstate.edu>, University of South Carolina Upstate

#115: Multimodal AI-Based Stroke Prediction Using Bio-Signals
Kayam Saikumar, G. Vedavyas, Mohamed Baza, Wassila Lalouani

#114: Medical Cancer Documents Categorization Based on Bidirectional Encoder Representations from Transformers Stack with LSTM
Kamorudeen Amuda, Qianlong Wang, Lei Zhang, Jinjuan Feng

#123: Depression Severity Using NHANES Data [Online]
Sharmin Nahar, Md Mashfiquer Rahman, Kailash Dhakal, Md Mostafijur Rahman, Zhonghui John Wang, and Subhajit Chakrabarty

#65: A Systematic Literature Review of Audio-Visual Multimodal Depression Detection
Samia Alghamdi, Yeong-Tae Song

#44: ClarityConsensus: Cybersecurity for Internet of Medical
Vehicles of Medical Texts for Lay Audiences [Online]
Mouheb Mehdoui, Amel Fraisse, Mounir Zrigui, Widad Mustafa El Hadi, Jinie Pak, Yeong-Tae Song

C2: Healthcare AI and Biomedical Analytics (3:50 ~ 5:10 PM EST, Room 3)
Chair: Subhajit Chakrabarty, <Subhajit.Chakrabarty@lsus.edu>, Louisiana State University Shreveport.

Decoding Early Lung Cancer: Machine Learning Insights from Transcriptomic Biomarkers
Roshan Paudel, Tijesunimi Adeyemi, Kyra Elkassar, Jada Slatter and Sakina Shreshtha

A Self-Supervised Framework for Automated Mouse Brain Extraction in Data-Constrained MRI Studies
Tayyab Ali, Xin Huang, Miroslaw Janowski, Guanda Qiao and Lei Zhang

Deep Learning-Based Automated Diabetic Retinopathy Lesion Segmentation: A Systematic Comparison (Online Presentation)
Md Faisal Kabir, Marzia Mostafiz, Marshia Mim, Moonmoon Khanam, Pooja Roy and Mrinmoy Karmokar

Automated cartilage loss fraction: a deep learning-based quantitative method for early detection of cartilage loss
Lei Zhang, Julius Akan, Ze Wang, Ronnie A. Sebro and Stephanie Jo

Socioeconomic Determinants and County-Level Diabetes Burden: A Predictive Analytics Approach Using SAS
Rand Obeidat, Edouard Niyonshuti, Travis Brown, Lavell Allen, Danielle Sheppard, Sindy Reyescampos and Eman Alrefai

Zoom Links for Each Session
Room1 https://towson-edu.zoom.us/j/96772203517?pwd=saH7cbCKcmoxSzAtroS00vdmCzSQhB.1
Room2 https://towson-edu.zoom.us/j/91090481806?pwd=xJ848puLX1GaTQKry4gYOBjv3rLvKF.1
Room3 https://towson-edu.zoom.us/j/98444034152?pwd=RoCvTsPqbc00VUX4F8CY7l1QCluGsQ.1

Day 2 - Thursday, May 28, 2026

A3: LLMs, AI Agents & Trustworthy AI (9:10 - 10:30 AM EST, Room 1)

Chair: Minhaz F. Zibran, <zibran@isu.edu> , Idaho State University

#08:When AI Agents Submit Code: A Quantitative Study of Agentic Pull Requests Across Languages and Tasks
Aney Paul, Minhaz Zibran, Farjana Eishita

#12: Temporal Poisoning: A Non-Adversarial, Timing-Induced Instability in Long-Term Memory of LLM Agents
Mikiyas Semu, Milon Biswas, Wei Yu

#84: Detect and Correct AI Drift and Hallucination Using Agentic Neurosymbolic AI Architecture
Valerie Price, Yeong-Tae Song

#99: Prompt Injection as a Systemic Vulnerability in LLM-Based Tools: Threat Models, Empirical Analysis, and Mitigation Strategies
Mukesh Mani Tripathi, Damodar Dhital, Himal Aryal

#97: Understanding User Barriers to Web Security: A Systematic Review of User Studies
Himanshu Jha, Rifat Ara Tasnim, Aney Rani Paul, Minhaz Zibran, Farjana Eishita

B3: Software Engineering & Code Intelligence (9:10 - 10:30 AM EST, Room 2)
Chair: Mian Qian <MQIAN@uscupstate.edu> , University of South Carolina Upstate

#33: Dom4LLM: Domain-Adaptive Large Language Models for Automated Code Clone Refactoring [Online]
Dream Meng Xia, Myoungkyu Song

#23: Automated Requirements Assessment and UML Generation from Natural Language [Online]
Amir Zhumagaliyev, Han-joon Kim

#25: Dual Context: Leveraging Structured Application Context for Code Generation and Runtime Feature Activation via Chat Interfaces
Vijay Vardhan Tadimeti, Eric Enright, James Schneider, Kyle Dumas, Noah Maddox

#31: GitReq: A Gold Standard Dataset for Software Quality Requirements [Online]
Farha Kamal, Md Humaun Kabir, Md Rakibul Islam

#57: Knowledge Lever Risk Management for Software Engineering: A Stochastic Framework for Mitigating Knowledge Loss [Online]
Mark Chua, Samuel Ajila

C3: LLM Applications, Responsible AI, and Education(9:10 - 10:30 AM EST, Room 3)
Chair: Madhusudan Srinivasan, <srinivasanm23@ecu.edu>, East Carolina University

AI Hiring: Algorithmic Exclusion, Cultural Bias, and Ghosting

Mirna Jawhar, Shadi Jawhar, Majed Almotairi and Mohamad Alosta

A Multi-step Fake News Detection Framework using Large Language Model
Nithish Kumar V, R Shrinidhi and Sivaselvan B. L-FND

EduRAG: A Retrieval-Augmented Chatbot for Open Educational Resource Discovery
Tayyab Ali, Sowmya Sathi, Shivani Samarla, Hong Li, Xiaocan Lucy Wang, Bill Helman, Rick Davis and Xin Huang

From Corpus to Care: Building an LLM-Powered French Lexical Resource to Enhance Personalized Health Literacy. Authors: Mouheb Mehdoui, Amel Fraisse, Mounir Zrigui, Widad Mustafa El Hadi, Jinie Pak, and YeongTae Song

Benchmarking Ensemble Strategies and Local Explanations for Engineering Abstract Classification (Online Presentation)
Syeda Sadia Alam and Vahid Heydari

A4: Machine Learning Models & Architectures (11:00 AM ~ 12: 20 EST, Room 1)
Chair: Chuxiong Wu <chuxiong.wu@siu.edu> , Southern Illinois University

#09: Multi-Source STGNN for Traffic Prediction and Congestion Classification [Online]
Nuri Alperen Kose, Kubra Kose, Fan Liang

#98: Self-Referential Meta-Learning for Continual Few-Shot Learning [Online]
Hossein Jamali, Sergiu Dascalu, Frederick C. Harris Jr.

#38: Beyond Fidelity: A Multi-Axis Evaluation Framework for Tabular Generative Models [Online]
Rahim Chowdhury, Birjoo Vaishnav, Weixian Liao

#41: A Comparative Analysis of Statistical and Causal Learning Methods for UAV Fault Detection and Attribution
Atul Rawal

#42: Comparing Unified and Sensor-Separated Federated Learning Architectures for Privacy-Preserving Multi-Modal Classification
Atul Rawal

B4: Data Systems & Infrastructure (11:00 AM ~ 12: 20 EST, Room 2)
Chair: Vijay Tadimeti <tadimetiv@ornl.gov>, Oak Ridge National Laboratory

#14: Migrating a Legacy Web-Accessible Database Under Constraints: Updating Database and Improving User Interface Design
Yerang Lee, Nadim Alkharouf

#15: High-Volume ETL Pipeline Maintainability: A Change Aware Design Pattern [Online]
Deepaben Patel

#89: System-Level Evidnce on Metadata Protection Trade-Offs in Distributed File Hosting [Online]
e*Noureldin Ahmed, Khaled Khan, Fadi Yilmaz*

#130: Integrated Optimization Strategies for Resource-Constrained Network and Logistics Systems [Online]
Mohammed Danish, Uroosa Fatima

#109: EHR-Registry Interoperability: A Systematic Review of FHIR-Based Standards, Data Integration Architectures, and Implementation Outcomes
Oliver Pandian, Michael Brenner, Carly Milliren, Yeong-Tae Song

C4: Special Session 2: Practical Applications of Data Science and IT Systems (Online)
(11:00 AM ~ 12: 20, Room 3)
Chair: Hironori Takuma < takuma.hironori@chibatech.ac.jp >, Chiba Institute of Technology

Required Functions for a Tourist Route Recommendation System Using Generative AI
Kohki Inaba, Motoi Iwashita

The Role of Carbon Information in AI Service Choice for Businesses
Ken Nishimatsu, Akiya Inoue

Identification and Evaluation of Indirect Contributions in the IT System Implementation Process
Sora Ishizawa, Hironori Takuma

Proposal of OJT Instructional Strategies Based on Levels of Work and Employee Engagement
Momoka Noguchi, Hironori Takuma

A5: Human-Centered AI & Social Analysis (2:00 ~ 3:20 PM EST, Room1)
Chair: Chuxiong Wu <chuxiong.wu@siu.edu> , Southern Illinois University

#27: Learning Parents' Reactions to Children's Use of Social Media
Julius Akan, Michael Funskin, Amarachukwu Obi, Subrata Acharya, Nam Nguyen

#43: Context Aware Sentiment Classification of Parenting Narratives on AI and Social Media Using Fine-Tuned Transformers
Lawrence Oyaniyi, Gabriella Akenn Musa, Subrata Acharya, Nam Nguyen

#101: Misjudging Concern: AI Blind Spots in Reddit Discussions About Kids on TikTok
Priyadarshini Arcot, Michael McGuire, Nam Nguyen

#90: Using Eye Tracking to Examine Engagement with Data Visualization
Elizabeth Adeleye, Jesse Washburn, Michael McGuire, Jinjuan Feng, Lujie Chen, Joyram Chakraborty

#122: Lightweight Skill-Based LLM Workflows for Vulnerability Identification and Classification
Parnian Rashidi, Daniel Anoruo, Damodar Dhital, Lin Deng, Wei Yu

B5 : NLP & Language Processing (2:00 ~ 3:20 PM EST, Room 2)
Chair: Qingqing Li <qingqingli@towson.edu> , Towson University

#18: A Multimodal Late Fusion Framework for Semantic Classification of Graphical User Interface Elements
Jan Williams, Yifan Guo

#88: Data-Efficient QSAR Model via Uncertainty-Driven Active Learning and Hybrid Embeddings
Jung Hoon Lee, Yeong-Tae Song

#102: An Empirical Study of App Review Classification Using Large Language Models
Nirbhik Neupane, Farha Kamal, Md Rakibul Islam

#121: Formalizing Usable Security Metrics: A Systematic Approach to Definition, Measurement, and Evaluation
Abena Brempomaa Boateng, Khandakar Ashrafi Akbar, Joyram Chakraborty

#128: ADVERSA: Measuring Multi-Turn Guardrail Degradation and Judge Reliability in Large Language Models
Harry Owiredu-Ashley, Boxiang Dong

C5: Quantum, Optimization, and Emerging Methods (2:00 ~ 3:20 PM EST, Room 3)
Chair: Lei Zhang, <leizhang@towson.edu>, Towson University

A Self-Adaptive Quantum Inspired Evolutionary Algorithm for Multimodal Optimization
N Sai Srithaja and Dr Om Prakash Patel

Quantum Machine Learning and Quantum-Inspired Evolutionary Algorithms: A Survey and Performance Insights
N Sai Srithaja, Dr Om Prakash Patel and A Kapil Kumar

A6 : Education & Learning Technologies (3:50 ~ 5:10 PM EST, Room 1)
Chair: Chhaya Kulkarni <ckulkarni@towson.edu>, Towson University

#7: Promoting Hands-on Edge AI Education with Hardware and Software Co-design
Yifan Guo, Cheng Qian, Wei Yu

#16: K–12 Informal Learning Passport: A Blockchain Framework for Verifiable and Equity-Driven STEM Recognition
Madhusudan Srinivasan, Xi Lin, Namith Nishal Raphael

#92: SAGE: State-based Assessment and Grading Engine for Systems Administration Education [Online]
Zachary Estreito, Vinh Le, Frederick C. Harris Jr., Sergiu Dascalu

#124: AlignED: Enforcing Constructive Alignment as an Architectural Invariant in AI-Generated Cybersecurity-focused Software Engineering Curriculum
Chizoba Ubah, Taylor Blair, Sidd Kaza

#39: Smartphone Context Event Prediction using Open Source Large Language Model [Online]
Md Amit Khan, Navid Mohammad Imran, Renee Bryce

B6 : S/W Engineering, Intelligent Systems & Applied AI (3:50 ~ 5:10 PM EST, Room 2)
Chair: James Schneider <schneiderjr@ornl.gov>, Oak Ridge National Laboratory

#86: Bridging the Customer–Developer Understanding About the Scope of Custom Information Systems in Evolution Projects: A Field Experiment [Online]
Anelis Pereira-Vale, Fabiane Benitti, Maíra Marques, Daniel Perovich, Sergio F. Ochoa

#94: Productivity and Rework in AI-Assisted Front-End UI Development: A Workflow-Based Exploratory Study [Online]
Niharika Pramod Pujari

#116: A Visual Instrument to Support the Qualification of Customer Requests in Micro- and Small Software Enterprises [Online]
Carlos A. Vasquez, Tomás Vera, Daniel Perovich, Sergio F. Ochoa

#96: IBNet: Inverted Bottleneck Network for Lightweight Automatic Speech Recognition
Nikan Kadkhodazadeh, Owen Leitzell, Siddique Chand, Yuqi Song, Fei Zuo, Chuxiong Wu, Xin Zhang

#110: A Machine Vision Framework for Bangladeshi Geographical Indication Dessert Recognition: Comparative Analysis with Traditional Machine Learning and Deep Learning Models [Online]
Dip Kundu, Shakibur Rahman Bhuiyan, Zarif Wasif Bhuiyan, Shipra Banik, Md. Tarek Habib

C6: Security, Privacy, and Networked Systems (3:50 ~ 5:10 PM EST, Room 2)
Chair: Atul Rawal <atul.rawal@ieee.org>, U.S Army DEVCOM Army Research Lab

Real-Time Conflict Detection and Resolution in Multi-Controller SDN: A Timestamp-Based Decentralized Gossip Protocol
Mousa Aljohani and Jorge Cobb

Hub Hijacking: Structural Retrieval Amplification as a Vulnerability in Dynamic LLM Memory Graphs
Mikiyas Semu, Milon Biswas and Wei Yu

GeneLeak: Generic Algorithm Based Search for Black-Box Privacy Leakage in LLMs
Mil

Zoom Links for Each Session
Room1 https://towson-edu.zoom.us/j/96772203517?pwd=saH7cbCKcmoxSzAtroS00vdmCzSQhB.1
Room2 https://towson-edu.zoom.us/j/91090481806?pwd=xJ848puLX1GaTQKry4gYOBjv3rLvKF.1
Room3 https://towson-edu.zoom.us/j/98444034152?pwd=RoCvTsPqbc00VUX4F8CY7l1QCluGsQ.1

Day 3 - Friday, May 29, 2026

A7 : Robotics, Systems & Applied AI (9:10 – 10:30 AM EST, Room1)

Chair: Atul Rawal <atul.rawal@ieee.org> , U.S Army DEVCOM Army Research Lab

#02: Flying Hawk: An Algorithm to Enhance Drone Performance by PID Controller Tuning
Victor Wang

#78: An AI Surveillance Framework with Multi-Source Fusion and Temporal Validation for Public Safety
Aliyu Aliyu, Jin Guo, Guobin Xu, Lin Deng

#80: SegWorkbench: A Unified Framework for Deep Learning–Based and Interactive Image Segmentation
Damodar Dhital, Abishek Pokhrel, Favour Ashu, Vir Chuy Darm, Guanda Qiao, Lei Zhang

#82: A⁴-Gov: A Governance Architecture for AI Service Systems [Online]
Min Seon Ahn, Yong Ik Yoon

#104: A Hybrid Machine Learning Framework for Quantifying Contact Angle Measurement in Soil Water Repellency Analysis [Online]
Zeinab Farrokhi, Emma E. Regentova, Hans Moosmüller, Markus Berli, Frederick C. Harris Jr.

B7: AI Safety, Trustworthiness & Robustness (9:10 – 10:30 AM EST, Room2)
Chair: *Chizoba Ubah <cubah@towson.edu> , Towson University*

#35: Safety and Alignment Frameworks for High-Autonomy AI Systems [Online]
Suchismita Chatterjee, Palash Bansal, Rajat Shrivastava, Nikhar Shah

#21: Resilience of Confidence-Based Cascade Triage in Mammography under Structured Clinical Domain Shifts [Online]
Wellington Amponsah, Emmanuel Freeman, Israel Edem Agbehadji, Martin Mabeifam Ujakpa, Daniel Gyasi-Nyarko, Philomina Annanse, Gabriel Fredrick Anayne-Lah Amponsah

#26; Evaluating Graph Neural Network Architectures for Improved Equivalent Mutant Detection
Suril Waghmare, Carlos Mina Lopez, Honghe Zhou, Suranjan Chakraborty, Lin Deng, Josh Dehlinger

#22: STMutants: A Mutation Testing Dataset for Structured Text Programs in Industrial Automation [Online]
Md Humaun Kabir, Md Rakibul Islam, Helen Lou

C7: Special Session 3: Analysis, Evaluation, and Usage of Information, Systems, and Humans (Online) (9:10 – 10:30 AM EST, Room2)
Chair: Yuya Yokoyama < yokoyama-yuya@aiit.ac.jp>, Advanced Institute of Industrial Technology

Determination of Dissaving Risk against Life Expectancy for Elderly People Using Additional Anonymous Data
Yuya Yokoyama

Explicit Specialization as Generalization of Semantic Specialization
Teruhisa Hochin

Physiological Aspects in Enhancing Positive Moods with Images, Sounds, and Scents

Shunya Nakamura, Teruhisa Hochin

Two-way Analysis & Under-expenditure Risk for Elderly People Using Characteristic Expenditure Items
Yuya Yokoyama

A8 : Scientific & Environmental AI (11:00 AM – 12:20 PM EST, Room 1)
Chair: *Atul Rawal <atul.rawal@ieee.org> , U.S Army DEVCOM Army Research Lab*

#118: Glacier Velocity Prediction from Multimodal Data using Deep Learning
Udaysinh Rathod, Devesh Sarda, Subhajit Chakrabarty, Chhaya Kulkarni, Priyadarshini Arcot

#125: Multivariate Anomaly Detection in Central West Greenland Using Variational Autoencoders
Priyadarshini Arcot, Subhajit Chakrabarty, Chhaya Kulkarni

#129: Leadership and Organizational Readiness in IoT-Enabled Predictive Maintenance [Online]
Jafrul Islam Sojol, Rohit Kumar

#05: Comparative Analysis of Geometric Distance and Classification Performance in Dimensionality Reduction for Acoustic Data [Online]
Pildong Hwang, Yanggon Kim

#91: A Data-Driven Analysis of AP Poll Rankings in College Football
Jung X Lee, Keunsu Han, Yeong-Tae Song

B8: Explainable AI and Safety Systems (11:00 AM – 12:20 PM EST, Room 2)
Chair: James Schneider <schneiderjr@ornl.gov>, Oak Ridge National Laboratory

#83: Mark2Cause Knowledge Dataset (M2CKD): Road Marking Causal Knowledge for Explainable Situation Awareness in Autonomous Driving [Online]
Subi Kim, Jimin Ryu, Jieun Kang, Yong Ik Yoon

#77: Real-Time Detection of Personal Protective Equipment on Construction Sites Using Deep Learning Computer Vision,
Derrick Mirindi, Frederic Mirindi and David Sinkhonde

#126: A Hybrid Resampling-Ensemble Framework for Detecting Hidden Intrusion Patterns in Permissive Firewall Traffic [Online]
Md Mashfiquer Rahman, Sharmin Nahar, Kailash Dhakal, Khairul Anam, Md Mostafijur Rahman, and Subhajit Chakrabarty

#17: FedBridge++: Privacy-Preserving Federated Self-Supervision for Tabular Loan Approval with Interpretable Transformers [Online]
Md. Zubayer Ahmad Shibly, Sheikh Arman Karim Aditto, Md. Jahidul Islam, Al-Amain, Maybin K. Muyeba and Mo Saraee

C8: Vision, Multimodal Recognition, and Affective AI (11:00 AM – 12:20 PM EST, Room 3)
Chair: Mo Saraee, <m.saraee@salford.ac.uk> University of Salford-Manchester

CNN-Based Hand Gesture Recognition with Real-Time Demonstration in Complex Backgrounds
Isa Ibrahim, Dr. Kofi Nyarko and Emmanuel Masa-Ibi

Pose-Guided Human Image Completion with Lightweight Diffusion Transformers
Xinquan Luo and Haotian Guo

Deep Learning-based Recognition and Standardized Reconstruction of Circuit Schematics
Xinquan Luo, Ke Chen, Jinyan Wang, Runyi Zhang and Ziyan Luo

Intelligent Camera Switching Based on Multimodal Fusion and Posture Recognition
Xinquan Luo, Runyi Zhang, and Ke Chen

Explainable Emotion Recognition in Conversations with Context-Aware Transformer Models (Online Presentation)
Isidoros Perikos

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Room3 https://towson-edu.zoom.us/j/98444034152?pwd=RoCvTsPqbc00VUX4F8CY7l1QCluGsQ.1