



2026

Madrid, Spain
July 7-10, 2026

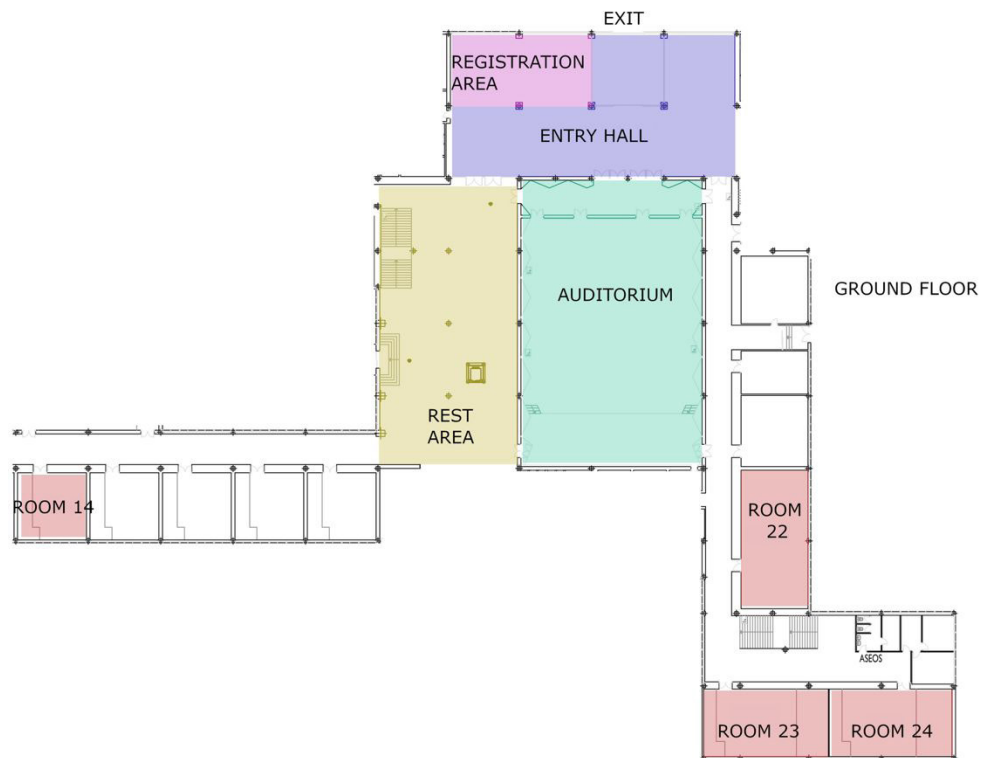


***Agentic AI: Innovative Software,
Computing Paradigms, and
Applications for Migrating from
Reactive Models to Proactive
Systems***

Conference Program



**Ground Floor - Escuela Técnica Superior de Ingenieros de Caminos
Canales y Puertos. Calle del Prof. Aranguren, 3**



First Floor - Escuela Técnica Superior de Ingenieros de Caminos



**Scan QR code for
google map to the
venue**

COMPSAC 2026 - PROGRAM AT A GLANCE



MONDAY JULY 6 8:00 PM - 9:00 PM

COMPSAC Welcome Reception

Location: Pabellón de los Jardines de Cecilio Rodríguez. Pº del Uruguay, 5

Scan QR code for google map

TUESDAY JULY 7

	ROOM 26	ROOM 24	ROOM 23	ROOM 22	SALA TORRES QUEVEDO	ROOM 14	SALA VERDE	ROOM 46
9:00 AM - 10:30 AM	AAI 1	SETA 1	SEPT 1	DSAT 1	BEST 1	CAP 1	ITIP 1	ITA 1
10:30 AM - 11:00 AM	COFFEE BREAK - FIRST FLOOR HALL							
11:00 AM - 12:30 PM	Opening Session: COMPSAC General Chairs (11:00 - 11:30) Edmundo Tovar, & Javier Soriano Location: Auditorium (Salón de Actos)				KEYNOTE: Sorel Reisman <i>From Retrospection to Prospection: 50 Years of COMPSAC and the Road Ahead</i> Location: Auditorium (Salón de Actos)			
12:30 PM - 1:30 PM	LUNCH BREAK & KEYNOTE: Dejan Milojic Technology Trends, Megatrends, and Regional Workforce Location: Auditorium (Salón de Actos)							
1:30 PM - 3:00 PM	AAI 2	SRS 1	SETA 2	SCH 1	HCSC 1	NCIW 1	CRoS 1 SEPT 4	FA 3
3:00 PM - 3:30 PM	COFFEE BREAK - FIRST FLOOR HALL							
3:30 PM - 5:00 PM	AAI 3	RPE	SETA 3	DSAT 2	BEST 2	NCIW 2 DSAT 3	Doc2KG 1 QUORS 1	SRS 2 JC 1

WEDNESDAY JULY 8

	ROOM 26	ROOM 24	ROOM 23	ROOM 22	SALA TORRES QUEVEDO	ROOM 14	SALA VERDE	ROOM 46
9:00 AM - 10:30 AM	AAI 4	COMPSAC 50 - 1	SETA 4	SEPT 2	FA 1	ITIP 2 HCSC 2	SCH 2 BEST 3	ADMNET 1
10:30 AM - 11:00 AM	COFFEE BREAK - FIRST FLOOR HALL							
11:00 AM - 12:30 PM	PCIC Report (11:00 - 11:30) Hiroyuki Ohsaki & Javier Soriano Location: Auditorium (Salón de Actos)				KEYNOTE: Claudio Feijóo <i>Geopolitics of AI in a Multipolar Context</i> Location: Auditorium (Salón de Actos)			
12:30 PM - 1:30 PM	LUNCH BREAK							
1:30 PM - 3:00 PM	KEYNOTE: JOHN L. GUSTAFSON	AVKMT 1 STA 1	MVDA 1 MEDI COMP 1	DDS- BDAF 1 SDIM 1	FA 2	OER 1	SESS 1 RAISCity 1	MENTORIUM
3:00 PM - 3:30 PM	COFFEE BREAK - FIRST FLOOR HALL							
3:30 PM - 5:00 PM	PLENARY PANEL <i>AI Driven Applications Shaping the Future</i> Location: Auditorium (Salón de Actos)							

COMPSAC 2026 - PROGRAM AT A GLANCE



WEDNESDAY JULY 8 8:00 PM - 10:00 PM

bus leaves conference venue at 7:00 PM

COMPSAC Conference Banquet

Location: La Masía de José Luis. P.º de la Prta del Ángel, 3

Scan QR code for google map

THURSDAY JULY 9

	ROOM 26	ROOM 24	ROOM 23	ROOM 22	SALA TORRES QUEVEDO	ROOM 14	SALA VERDE	ROOM 46
9:00 AM - 10:30 AM	AAI 5	SIOT 1	SEPT 3	ASYS 1	COMPSAC 50 - 2	EATA 1	AIML 1	BlockDLT 1
10:30 AM - 11:00 AM	COFFEE BREAK - FIRST FLOOR HALL							
11:00 AM - 12:30 PM	COMPSAC 2027 Planning Presentation (11:00 - 11:30) Yasuo Okabe Location: Room 26				KEYNOTE: Shinji Shimojo <i>From Testbeds to Valleys of the Wind: Cultivating the Next Generation of Cyber Infrastructure in the Age of Agentic AI</i> Location: Room 26			
12:30 PM - 1:30 PM	LUNCH BREAK							
1:30 PM - 3:00 PM	AAI 6	SETA 5	EATA 2 ASYS 2 SIOT 2	DIGI HEALTH 1	COMPSAC 50 - 3	ESAS 1 SCA 2	eHealth IOT 1	COMPSAC Standing Committee
3:00 PM - 3:30 PM	COFFEE BREAK - FIRST FLOOR HALL							
3:30 PM - 5:00 PM	PLENARY PANEL: Modern Computing in 80 Years – Where We Came From and Where We Are Going Location: Room 26							

FRIDAY JULY 10

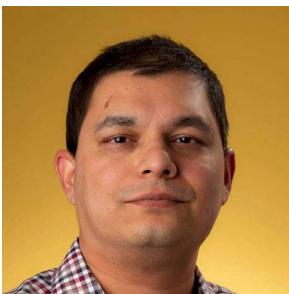
	ROOM 26	ROOM 24	ROOM 23	ROOM 22	SALA TORRES QUEVEDO	ROOM 14	SALA VERDE	ROOM 46
9:00 AM - 10:30 AM	AIFC 1	CELT 1	INDUSTRY 1 AAI 7			CDS 1	DADA 2 ESAS 2 STPSA 2	
10:30 AM - 11:00 AM	COFFEE BREAK - FIRST FLOOR HALL							
11:00 AM - 12:30 PM	Workshop Chairs' Report (11:00 - 11:30) Location: Room 26				KEYNOTE: Sheikh Iqbal Ahamed <i>The Future of Compliance Automation</i> Location: Room 26			
12:30 PM - 1:30 PM	LUNCH BREAK							
1:30 PM - 3:00 PM	AIML 2	CELT 2	MET 1	SOCIETY 5.0	DADA 1	ADMNET 2	STPSA 1	
3:00 PM - 3:30 PM	COFFEE BREAK - FIRST FLOOR HALL							
3:30 PM - 5:00 PM	DIGI HEALTH 2	SCA 1	ICT4 SMART GRID 1	DBDM 1 ISHSW 1	SAPSE 1	NETSAP 1	TADM 1 MET 2	MEDI COMP 2 CDS 2

Message from the Organizing Committee



Sheikh Iqbal Ahamed,
Marquette University,
Standing Committee
Chair

On behalf of the COMPSAC 2026 organization, I would like to welcome you to the 50th Annual IEEE International Computers, Software, and Applications Conference (COMPSAC 2026), July 7-10, 2026, in Madrid, Spain. COMPSAC, the IEEE Computer Society's signature conference on Computers, Software, and Applications, was first held in 1977 in Chicago. In the years since its founding, it has become one of the major international forums for academia, industry, and government to discuss research results, advancements, and future trends in computer and software technologies and applications. The technical program includes research papers, research and industry panel discussions, fast abstracts, student research symposiums, and workshops on emerging important topics. It now alternates its meeting among sites in Asia, Europe, and North America. Over the years, its meetings have advanced the major topics in computing and software development. This year is a special one for us, as we celebrate 50 years of COMPSAC together with the 80th anniversary of the IEEE Computer Society, and we are glad to be meeting again fully in person.



Hossain Shahriar,
University of West
Florida, USA
Proceedings Chair

The theme of COMPSAC 2026 is "Agentic AI: Innovative Software, Computing Paradigms, and Applications for Migrating from Reactive Models to Proactive Systems." The theme points to an important change in artificial intelligence. Much of the work so far has focused on systems that generate information or respond to queries. The next step is toward proactive AI agents that can plan multi-step processes, make their own decisions, and learn from their interactions. These agents are already reshaping industries by offering personalized services, faster response times, and more efficient operations. Building them well takes more than technical performance. As these systems become more autonomous, it is just as important that they are ethical, safe, sustainable, and trustworthy. COMPSAC 2026 offers a platform to discuss both the opportunities and the challenges this shift brings, and it supports research and development in data-driven intelligence, digital transformation, and a range of emerging applications, including smart and connected health, networked healthcare, wearable computing, the internet-of-things, cyber-physical systems, smart cities, and a smart planet.



Kazi Shafiul Alam,
Governors State
University, USA
Proceedings Chair

COMPSAC is a premier global forum for crosscutting computing research, practice, and education. In its long history with the Computer Society, COMPSAC has earned a strong reputation as a meeting with high-quality technical content and wide-ranging discussion of technical issues. It is also known as a well-planned, well-organized, well-attended, and well-managed event. The COMPSAC conference program is supported by several international societies, including the Information Processing Society of Japan (IPSJ) and the China Computer Federation (CCF), as well as special technical communities such as Big Data from the IEEE Computer Society. This year the conference will host more than a dozen symposia and over thirty workshops, together with Fast Abstracts, a Student Research Symposium, a Research Projects Exhibition, and the IEEE Mentorium for early-career researchers. It will also feature distinguished keynote speakers and plenary panels that bring an international perspective to the conference theme, along with a special Legacies Symposium marking the IEEE Computer Society at 80 and IEEE COMPSAC at 50. The program will further include a special organized session presenting recent results from Japan's JST programs (CREST, PRESTO, and ACT-X), which highlights

the country's latest contributions to Society 5.0 platform software and cyberinfrastructure and brings a strong delegation of researchers from Japan to Madrid. Finally, it will bring together funding agencies and industry representatives from around the world to share their vision for the future of computing in a more intelligent and autonomous world.

COMPSAC received outstanding support from its organizing committee and program committee members, and the local arrangement committee has done an excellent job. Thank you to all the volunteers for their work. Please join us in Madrid to celebrate this milestone year and the success of everyone who contributed to the program. We look forward to seeing you there.

Message from the General Chairs



Edmundo Tovar
Universidad
Politécnica de Madrid,
Spain

Dear COMPSAC 2026 Participants,

It is a true honor to welcome you to Madrid for IEEE COMPSAC 2026, a particularly meaningful edition of our conference. After the planned celebration of COMPSAC in Madrid in 2020 was cancelled due to the pandemic, we now receive the COMPSAC community with renewed excitement, gratitude, and enthusiasm. As local hosts and General Chairs, we are proud to finally welcome this conference to the Universidad Politécnica de Madrid and to a city that is open, vibrant, and deeply connected to science, technology, culture, and international collaboration.

The theme of this edition, focused on Agentic AI and the transition from reactive models to proactive, autonomous, trustworthy, and responsible systems, could not be more timely. We are at a decisive moment for computing, software engineering, and their applications: intelligent systems are transforming how we design, work, learn, conduct research, and make decisions. COMPSAC 2026 provides a unique forum to discuss these advances, examine their opportunities and risks, and contribute, as a scientific and professional community, to a technological future that is more innovative, secure, ethical, and inclusive.



Javier Soriano
Universidad
Politécnica de Madrid,
Spain

This edition also marks the 50th anniversary of COMPSAC and the 80th anniversary of IEEE Computer Society, two milestones that invites us to look back with pride at the conference's remarkable history while looking ahead to its role in the decades to come. For half a century, COMPSAC has served as an international forum for sharing knowledge, building collaborations, and anticipating trends in computing, software, and applications. Celebrating this anniversary in Madrid gives our gathering a special significance.

Beyond the technical sessions, we hope your stay will allow you to enjoy all that Madrid offers as a venue for international conferences: excellent infrastructure, a rich cultural life, renowned gastronomy, world-class museums, historic landmarks, lively neighborhoods, and the warm hospitality that is part of the city's identity. We trust that COMPSAC 2026 will also be an opportunity to reconnect, exchange ideas, discover new perspectives, and strengthen both personal and professional ties.

We warmly welcome you to Madrid and wish you a fruitful, inspiring, and memorable conference.

Message from the Program Chairs-in-Chief



Hiroyuki Ohsaki,
Kwansei Gakuin
University, Japan

Welcome to COMPSAC 2026, the 50th IEEE Computer Society International Conference on Computers, Software & Applications, hosted in the vibrant city of Madrid, Spain. This year marks an extraordinary dual milestone: the 50th anniversary of the COMPSAC conference and the 80th anniversary of the IEEE Computer Society. For half a century, COMPSAC has served as a premier international forum, bringing together academic researchers, industry experts, and policymakers to navigate and shape the future of computing technologies.

Our theme for 2026 is “Agentic AI: Innovative Software, Computing Paradigms, and Applications for Migrating from Reactive Models to Proactive Systems.” This theme highlights a fundamental paradigm shift in the philosophy and architecture of artificial intelligence. Historically, AI has operated on a reactive model—functioning as highly sophisticated oracles that generate information only in response to explicit human queries. The next evolutionary leap is the transition to proactive AI agents. Unlike their reactive predecessors, agentic systems possess the autonomy to formulate multi-step plans, interact dynamically with external tools and APIs, make independent decisions, and learn iteratively from environmental feedback.



Alfredo Cuzzocrea,
University of Calabria,
Italy

As highlighted by recent data, including the Stanford AI Index 2025, these theoretical constructs are now practical realities, surpassing human baselines in specialized tasks like complex coding assistance and time-sensitive operational decision-making. However, delegating autonomy to software systems introduces profound engineering and societal challenges. COMPSAC 2026 emphasizes not only the technical mechanisms of multi-agent coordination and adaptive algorithms but also the indispensable requirement to balance this innovation with responsibility—ensuring systems are deeply grounded in explainability, safety, and ethical reasoning.



Miriam Capretz,
Western University,
Canada

To explore the breadth of these advancements, we have organized 15 technical symposia this year. To ensure our tracks reflect the most critical emerging trends, we restructured our program from last year by retiring one symposium and introducing three exciting new ones: Applied Artificial Intelligence (AAI), BlockChain (BEST), and Cognitive Robotic Systems (CRoS). In addition to these 15 core symposia, we are proud to host a special Symposium on IEEE Computer Society at 80 and IEEE COMPSAC at 50: Legacies of Computing Innovation to commemorate our historic milestones.

The global computing community's response to this year's call was exceptional. We received 437 initial submissions from approximately 50 countries. After desk-rejecting 13 invalid submissions to maintain strict compliance with IEEE formatting and publishing policies, 424 submissions advanced to the review phase across the 15 symposia. Each paper underwent a rigorous double-blind review process conducted by experts from our Technical Program Committee.



Shamem Ahmed,
Western Washington
University, USA

During the Program Committee meeting, we finalized the following competitive acceptance results:

121 submissions were accepted as full papers (10 pages), resulting in a full paper acceptance rate of 28.5%.

113 submissions were accepted as short papers (6 pages), an acceptance rate of 26.7%.

Additionally, to foster emerging ideas and continuous discourse, 49 papers containing highly promising research that could not be accommodated in the main symposia were transferred to the COMPSAC workshops, and 18 papers were recommended for presentation in the Fast Abstract sessions.

The high technical quality of this conference relies entirely on the dedication of our peers. We extend our deepest gratitude to the 457 Program Committee members from approximately 52 countries who volunteered their time and profound expertise to rigorously evaluate the submissions. We also sincerely thank the authors of every submitted paper for choosing COMPSAC as the venue to share their hard work.

We would like to explicitly acknowledge the outstanding efforts of our Organizing Committee. Special thanks are due to our General Chairs, Edmundo Tovar and Javier Soriano, for their leadership and hosting efforts in Madrid. We are also immensely grateful to the Workshop Program Chairs—AKM Jahangir Alam Majumder, Munirul Haque, and Tomoki Yoshihisa—for curating a diverse and engaging workshop program. Finally, we offer our profound appreciation to our Standing Committee Chair, Sheikh Iqbal Ahamed, Vice Chairs Mohammad Zulkernine and Dave Towey, and Associate Chair San Murugesan. Their continuous guidance and vision ensure that COMPSAC remains a vital and forward-looking community.

We hope you find the keynote addresses, technical sessions, and workshops intellectually stimulating, and we look forward to the collaborative discussions that will undoubtedly shape the proactive computing systems of tomorrow.

Message from the Workshops Program Chairs

It is our great pleasure to welcome you to the workshops of the 50th IEEE International Conference on Computers, Software, and Applications (COMPSAC 2026), held in Madrid, Spain, from July 7–10, 2026. The theme of COMPSAC 2026 is “Agentic AI: Innovative Software, Computing Paradigms, and Applications for Migrating from Reactive Models to Proactive Systems”. highlights the transformative role of intelligent, autonomous systems in shaping the future of computing.

Celebrating its 50th anniversary, IEEE COMPSAC continues its tradition as one of the premier international conferences in computer software, systems, and applications. Over the past five decades, COMPSAC has provided a distinguished forum for researchers, practitioners, industry leaders, and policymakers to share innovative ideas, present cutting-edge research, and explore emerging technologies that drive digital transformation. COMPSAC 2026 focuses on advancing computing technologies and software innovations that are transforming modern society. From Agentic AI and intelligent software systems to cybersecurity, cyber-physical systems, digital health, and next-generation applications, the conference showcases research that contributes to a more connected, secure, and sustainable future.

The conference aims to identify emerging challenges, foster collaboration, and shape future research directions by



**AKM Jahangir Alam
Majumder, University
of South Carolina
Upstate, USA**

presenting high-quality theoretical and applied research. COMPSAC 2026 brings together researchers, practitioners, industry professionals, and policymakers from around the world to exchange ideas and discuss advances in rapidly evolving computing technologies. Key topics include Artificial Intelligence (AI), software engineering, wireless and sensor networks, mobile and distributed computing, embedded and edge systems, big data analytics, cybersecurity, cyber-physical systems (CPS), digital health, and Internet of Things (IoT) security. As a premier international forum, COMPSAC provides a unique platform for exploring emerging trends and advancing software-intensive systems and applications.

This year, COMPSAC 2026 features 34 workshops covering a diverse range of topics in computer software, systems, and applications. These workshops complement the main conference by providing focused forums for discussing emerging research challenges, innovative solutions, and practical experiences. Together, the conference and workshops create a dynamic and engaging four-day technical program. In keeping with the COMPSAC tradition, the workshops bring together researchers, practitioners, and industry experts to exchange ideas, share experiences, and explore advances in the design, development, deployment, testing, and maintenance of robust software systems and applications. The workshops also foster interdisciplinary collaboration and strengthen connections among diverse research communities. A significant portion of the workshop contributions aligns with COMPSAC's longstanding emphasis on software engineering and software development. Notable workshops in this area include Quality Oriented Reuse of Software (QUORS), Security Aspects in Processes and Services Engineering (SAPSE), Software Test Automation (STA), and Security, Trust, and Privacy for Software Applications (STPSA). These workshops address critical challenges related to software quality, reliability, security, testing, and reuse, reflecting the core research themes that have long defined the COMPSAC community.



**Md Munirul Haque,
Butler University, USA**

Reflecting this year's theme of Agentic AI, which envisions the next generation of intelligent systems as proactive agents capable of autonomous decision-making, multi-step planning, and continuous learning within secure and sustainable cyber-physical environments, several workshops focus on advancing AI research and applications. These include AI and Forensics and Cybersecurity (AIFC), Advances in Artificial Intelligence and Machine Learning (AIML), Responsible AI for Smart Cities (RAISCity), and AR/VR/XR and AI-Driven Immersive Visualization in Medical Imaging and Healthcare (MedXR). The workshops with related scopes, such as Digital and Public Health (DIGI-HEALTH) and Smart Computing & Applications (SCA), also successfully contributed to the workshop sessions and further enriched the program by highlighting the growing impact of intelligent technologies across healthcare, smart environments, and emerging computing applications.



**Tomoki Yoshihisa,
Shiga University,
Japan**

Emerging technologies, networking, and applications form the third pillar in the COMPSAC tradition, with more than half of the contributions. We are pleased to report that the COMPSAC 2026 workshops are both well-balanced and highly engaging. The topics addressed in these workshops closely align with those of the main conference. We anticipate COMPSAC to be a highly stimulating venue that fosters meaningful interactions between researchers and practitioners, while also serving as an excellent forum for the exchange and development of new ideas.

We would like to express our sincere gratitude to the authors for their valuable submissions to our workshop. Each paper was reviewed by at least two to three reviewers, and we deeply appreciate the reviewers for their diligent effort and commitment throughout the review process. Following a rigorous evaluation, 189 papers were selected for oral presentation at the workshop. The presentations span a range of topics, including image processing,

intelligent control, digital twin technology, data perception, and related areas. This year, 49 papers were transferred from the main conference to the workshops.

We sincerely thank all authors who submitted papers to the workshops for their support of the conference. The selection process was carefully conducted by the workshop organizers. We also extend our appreciation to the organizers of all workshops and the workshop program committee members for their dedicated efforts and outstanding work, despite the constraints of a very tight review timeline. In addition, we are grateful to everyone involved in organizing COMPSAC 2026, as well as the standing committees, for their invaluable support in making COMPSAC 2026 a success.

It has been our great honor and privilege to serve as Workshop Program Chairs, embracing both the responsibilities and challenges of this role. We hope you will enjoy the academic program of COMPSAC 2026, as well as the host location.



**IEEE
COMPUTER
SOCIETY**



**Symposium on IEEE Computer Society at 80
and IEEE COMPSAC at 50:
*Legacies of Computing Innovation***

Wednesday July 8 & Thursday July 9

This year, the IEEE Computer Society marks 80 years since its inauguration, and COMPSAC, its signature conference on Computers, Software, and Applications, celebrates 50 years.

Since its inception, COMPSAC has been one of the most enduring and influential international forums in computing. It has brought together researchers, practitioners, educators, and industry leaders from around the world to share pioneering research, emerging innovations, and real-world insights spanning the breadth of software engineering, systems, applications, and technology trends.

To celebrate these two historic milestones, we are hosting this symposium, dedicated to reflecting on the impact, evolution, and legacy of COMPSAC and, more broadly, the IEEE Computer Society as a leading global force shaping computing research, education, and practice for eight decades.

The presentations in this symposium highlight major achievements, historical milestones, and defining moments in the IEEE Computer Society's history, as well as forward-looking perspectives and visions for its future role in an increasingly interconnected, intelligent, and software-driven world. Together, these reflections will place COMPSAC within the broader trajectory of IEEE CS and the global computing community.

The Symposium is more than a celebration; it is also a community archive and a forward-looking forum. By honoring 50 years of COMPSAC and 80 years of the IEEE Computer Society, we aim to capture how the computing community has evolved, recognize the individuals and ideas that have shaped its journey, and inspire future generations to carry forward and enhance these legacies.

Legacies Symposium Organizers

General Chair

Vladimir Getov
University of Westminster, UK

Program Committee Chairs

Cristina Seceleanu
Mälardalen University, Sweden

Sahra Sedigh Sarvestani
Missouri University of Science and Technology, USA

Advisory Board

Stephen S. Yau,
COMPSAC Standing Committee Chair 1977-2005
Arizona State University, USA

Carl K. Chang
COMPSAC Standing Committee Chair 2006-2015
Iowa State University, USA

Sorel Reisman,
COMPSAC Standing Committee Chair 2016-2025
California State University Fullerton, USA

Sam Xin, Chair, Department of Computer Science
Iowa State University, USA

Wednesday July 8

9:00 - 10:30 AM

The Early Electronic Digital Computers

Panel Chair: Vladimir Getov, University of Westminster

Panelists: Jack Copeland, John L. Gustafson, and Brian Stuart

1:30 PM – 3:00 PM

Keynote: COMPSAC50: A Brief History of Computing with Real Numbers

John L. Gustafson

Session Chair: Vladimir Getov, University of Westminster



Thursday July 9

9:00 -10:30 AM

Papers

Session Chair: Sahra Sedigh Sarvestani, Missouri University of Science & Technology

Absorbing·Adapting·Adding: A Brief Retrospective on Seventy-Year Computing in China

Hong Mei, Yungang Bao and Hongwei Si

Co-Evolution of Computing, IEEE CS, and COMPSAC: Reflections and Shaping the Future

San Murugesan

Vision for the Future of Insider Threat: Artificial Intelligence Risks and Challenges

William R. Claycomb and Daniel L Costa

History and Future of the SWEBOK Guide: Guide to the Software Engineering Body of Knowledge

Hironori Washizaki, Maria-Isabel Sanchez-Segura, Juan Garbajosa, Steve Tockey and Joaquim Jorge

IEEE Computer Society in the Age of AI: A Strategic Position Paper for the Next Decade

Jean-Luc Gaudiot and Shaoshan Liu

1:30 - 3:30 PM

Papers

Session Chair: Cristina Seceleanu, Mälardalen University

From One Victory Party to Another Victory Party: Reflections on Decades of Engagement with

IEEE COMPSAC and the Evolution of Computing

William Chu and Hongji Yang

History and Future Trends of Modern Computing and Software Engineering – Recounting 80 years of the IEEE Computer Society and 50 years of IEEE COMPSAC

Carl K. Chang

From SAINT to COMPSAC: A Quarter Century of Partnership between IEEE-CS and IPSJ

Yasuo Okabe

3:30 PM – 5:00 PM

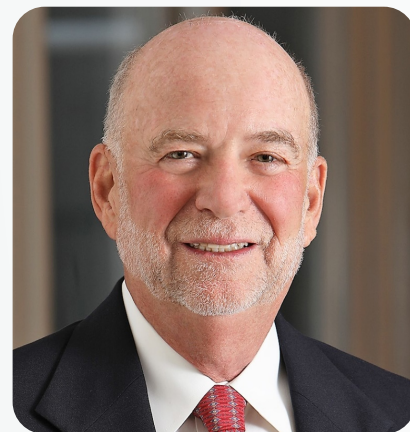
Plenary Panel: Modern Computing in 80 Years – Where We Came From and Where We Are Going



PLENARY KEYNOTE: Tuesday July 7

11:00 AM – 12:30 PM

From Retrospection to Prospecction: 50 Years of COMPSAC and the Road Ahead **Sorel Reisman**



As COMPSAC marks its 50th anniversary, I'm honored to reflect on the conference's legacy and its role in shaping global computing and education. Drawing from my decades of involvement with computer technology and open learning initiatives, I'll explore how looking back helps us better navigate what lies ahead. I'll share insights on the evolution of software, systems, and pedagogy, and offer a forward-looking perspective on the challenges and opportunities that await us. My goal is to inspire a renewed commitment to ethical innovation, inclusive collaboration, and lifelong learning as we chart the next chapter of COMPSAC's journey.



Sorel Reisman is Professor Emeritus of Information Systems at California State University, Fullerton, and a globally respected figure in computing, education, and digital transformation. He served as Managing Director of MERLOT, a collaborative consortium advancing open educational resources, and held influential technical and executive roles at IBM, Toshiba, and EMI, where he directed software engineering and strategic planning.

Reisman is an IEEE Life Fellow, recognized for his enduring impact on the computing profession, and a Fulbright Specialist and Honorary Member of the Information Processing Society of Japan (IPSJ), honoring his international leadership in technology and learning. As President of the IEEE Computer Society, he helped guide its organizational vision and broaden its professional outreach.

His extensive IEEE involvement includes service on many IEEE committees and boards, including the Publications Services and Products Board (PSPB), Technical Activities Board (TAB), and Education Activities Board (EAB). He also served as Vice President of the Computer Society's Publications Board and Electronic Products and Services Board, contributing to editorial strategy and digital innovation. Reisman has served on the editorial boards of IEEE Software, IEEE MultiMedia, and IT Professional, where he authored long-running columns on computing and pedagogy. Reisman served as the Editor-in-Chief of the IEEE eLearning Library. He currently chairs the IT Professional Advisory Committee and co-edits Computer magazine's Education column. He is the recipient of the Richard E. Merwin Award for Distinguished Service, the Computer Society's highest level volunteer service award.

Reisman has been pivotal in COMPSAC, the IEEE Computer Society's premier international conference, serving as Standing Committee Chair for a decade. He is also a board member of Eta Kappa Nu (HKN), the IEEE honor society, which celebrates academic excellence and ethical leadership.

He earned a BASc in Electrical Engineering, and both an MA and PhD in Computer Applications from the University of Toronto. With two books and over 125 publications, his career exemplifies a lifelong dedication to progress, accessibility, and global engagement in computing education.



PLENARY KEYNOTE: Wednesday July 8

11:00 AM – 12:30 PM

Keynote: *Geopolitics of AI in a Multipolar Context*

Claudio Feijóo

Drawing on my background as a telecommunications engineer, economist, some time with the policy-makers, more than three decades of engagement with IEEE, and direct experience with AI technology ecosystems in China and Europe, I will examine how (agentic) AI is reshaping the global balance of technological and economic power. In a multipolar world, AI is no longer just a field of scientific progress; it has become a strategic arena in which states, firms, and regional blocs compete through control of data, compute, talent, standards, and the infrastructures that enable innovation at scale. I will argue that this competition is not defined only by frontier models or radical breakthroughs, but also by mission-driven public investment, domain-specific adaptation, and the steady accumulation of advantage through incremental innovation, deployment, and integration across sectors.

The talk will also address the geopolitical importance of global value chains, especially semiconductors, cloud platforms, and hyperscale infrastructures, which increasingly determine who can develop and govern AI on their own terms. From this perspective, many regions of the world hold important strengths in research, industrial capabilities, and trusted governance, yet still face structural dependencies that may constrain its strategic autonomy unless innovation policy, industrial strategy, and digital infrastructure are better aligned. I will discuss how the future of AI is likely to emerge not under a single dominant power, but through a fragmented and interconnected order in which leadership depends on combining technological capacity, resilient supply chains, regulatory influence, and long-term strategic coordination.



Claudio Feijóo is Full Professor at the Technical University of Madrid (UPM), where he works at the intersection of technology, innovation, and geopolitics. He holds MSc and PhD degrees in Telecommunication Engineering, as well as an MSc in Quantitative Economics. He has held professional assignments across five continents, including roles at the European Commission and the Spanish Ministry of Industry, and has built an extensive international profile linking academia, policy, and innovation practice. He has been a member of IEEE since 1992, reflecting more than three decades of sustained engagement with the global engineering and computing community.

From 2014 to 2020, while based in Shanghai, he led cooperation initiatives with leading Asian universities and launched XiJi Incubator, the first incubation programme for Spanish-linked entrepreneurs in China, recognized with the Universities International Award by El Mundo in 2020. For his contributions to innovation and technology ties between Spain and Asia, he received Casa Asia's 2025 annual award in the Economy and Business category. He currently coordinates for the European Commission the expert group on digital technologies and policies in China, and serves on several of Spain's leading technology and AI advisory bodies, including AESIA, Banco de España, and the investment committees of ICO Next Tech and SETT. From 2022 to 2025, he held the Jean Monnet Chair in Technology Diplomacy and Digital Sovereignty at UPM, and from 2020 to 2025 he served as UPM's Director for Entrepreneurship and Innovation. He has more than 25 years of experience as a founder and mentor of start-ups, is currently engaged in the quantum communications venture Qoolnet, and has led major international initiatives on AI for the public sector and education such as AI4Gov (EC's Digital Skills and Jobs award in 2023) and its follow-on projects. Claudio Feijóo has published more than 300 works, with over 4,600 citations, serves on the editorial boards of leading academic journals, and is the author of recent books on China, technology, and international geostrategy (among them, "El gran sueño de China" KnowSquare award in 2023).



COMPSAC50 KEYNOTE: Wednesday July 8

1:30 PM - 3:00 PM

A Brief History of Computing with Real Numbers

John L. Gustafson

Most computer users assume the issue of how to store numbers on computer is a long-solved problem. With every system now becoming severely bandwidth-bound, the AI and HPC communities are realizing that this is not the case; there is enormous waste and inefficiency in the way we represent real numbers in particular, and therein lies an opportunity for improvement by increasing information per bit.

For example, of the 2^{64} possible bit patterns in IEEE 753 double-precision floating point, only about 2% are ever used. Modern floating-point was not designed; it evolved from human-friendly principles, not from what was mathematical and optimal for hardware design.

A clean-slate design called posit format is rapidly being adopted because it is more accurate, better fits the dynamic range, saves memory, bandwidth, energy, power, and money. Low-precision posits beat low-precision floats in dozens of studies, and are now in use by companies like Meta. The posit format has been refined recently to take less silicon and energy than floats of the same precision, and commercial processors are now shipping that use posit instead of float arithmetic.

How did we get here, and where might this lead? I will present a survey that goes back to the earliest electronic computers like the ABC and ENIAC, and show the fascinating history of computer numbers. The performance of a broad range of applications can be more than doubled by increasing information-per-bit, like another turn of Moore's law but without needing to shrink transistors.



Dr. John L. Gustafson is a computer scientist and pioneer in high-performance computing. He is best known for formulating Gustafson's Law, the foundational alternative to Amdahl's Law, which transformed the world's understanding of massively parallel scalability and earned him the inaugural Gordon Bell Prize in 1988. In industry, he has held senior and executive roles at Intel (Director and Lab Leader for energy-efficient and extreme-scale computing), AMD (Chief Product Architect and Senior Fellow), ClearSpeed Technology (CTO), and Massively Parallel Technologies (CEO). He created the unum and posit number systems, alternatives to IEEE floating-point that improve accuracy and energy efficiency. He has authored influential books (e.g., *Every Bit Counts*) and numerous highly cited papers on parallel performance, computer arithmetic, and HPC productivity. He holds applied mathematics degrees from Caltech and Iowa State University. Gustafson currently serves as Visiting Scholar at Arizona State University and Chief Scientist/Co-founder of Vq Research.

PLENARY PANEL: Wednesday July 8
3:30 PM - 5:00 PM
AI Driven Applications Shaping the Future
sponsored by IEEE Future Directions



Artificial Intelligence has been around for decades, but with rapid advancements in technology and adoption have become ubiquitous. It is not just AI but the intersections of all the distinct technologies that contribute to our world and humanity. These range from, but not limited to communications and networking, edge and cloud computing, digital twins, IoT, blockchain, AI and machine learning, intelligent data, and augmented and virtual reality. Non technological factors affect the application of technology like socio-economic, legal, and more. All these aspects can be attributed to what we call a megatrend.

Emphasis will be upon presenting practical applications and their implementations of interest to attendees. Subject matter expert speakers will comment on current and past implementations all towards development for a better future.



Kathy Grise, Senior Program Director – IEEE Future Directions, supports new and emerging initiatives, including cloud computing, big data, digital realities, AI/ML, digital twins, digital transformation, and public safety, supports IEEE Future Directions, and manages the digital presence team for Future Directions. Kathy serves as the Technical Program Chair of the IEEE COMPSAC 2026 Symposium – Data Sciences, Analytics, & Technologies (DSAT). Kathy received the 2024 IEEE Eric Herz Outstanding Staff Award, the highest recognition for a staff member.

Prior to joining the IEEE staff, Kathy held numerous positions at IBM, and most recently was a Senior Engineering Manager for Process Design Kit Enablement in the IBM Semiconductor Research and Development Center. Kathy led the overall IT infrastructure implementation, and software development in support of semiconductor device modeling verification, packaging, and delivery; device measurement and characterization data collection and management, and automation for device modeling engineers. Kathy is a graduate of Washington and Jefferson College, and an IEEE Senior member.

<https://www.linkedin.com/in/kathygrise>



Louis Nisiotis is leading research in innovation and application of eXtended Reality technologies to support and foster the ongoing digital transformation of a plethora of industrial, educational, entertainment and societal domains. He is an Assistant Professor at the University of Central Lancashire, Cyprus (UCLan Cyprus) leading the Games Development and Computer Graphics modules.

Dr Nisiotis is currently the Programme Chair of the IEEE International Symposium of Emerging Metaverse (ISEMV 2025 and previously 2024), he was the General Chair of the IEEE International Conference on Intelligent Reality (ICIR 2022), and is a review editor and editorial member for prestigious scientific journals and conferences. Dr Nisiotis is a Steering Committee Member of the IEEE Metaverse scientific community, and member of IEEE and IEEE Computer Society. He is also a Fellow of the UK Higher Education Academy.

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Dejan Milojevic is an HPE Fellow and VP at Hewlett Packard Labs, Milpitas, CA [1998-present]. Previously, he worked at the OSF Research Institute, Cambridge, MA [1994-1998] and the Institute “Mihajlo Pupin”, Belgrade, Serbia [1983-1991]. He received his Ph.D. from the University of Kaiserslautern, Germany (1993), and his MSc/BSc from Belgrade University, Serbia (1983/86). His research interests include systems software, distributed computing, systems management, and HPC. Dejan has over 300 papers, 2 books, and 100 granted and 75 pending patents. Dejan is an IEEE Life Fellow (Fellow since 2010), ACM Fellow (2025), and HKN and USENIX member. Dejan was on 9 Ph.D. thesis committees, and he mentored over 80 interns.

Dejan was president of the IEEE Computer Society (2014), an IEEE presidential candidate in 2019, editor-in-chief of IEEE Computing Now and Distributed Systems Online, and he has served on many editorial boards and TPCs. Dejan led large industry-government-university collaborations, such as Open Cirrus (2007-2011) and New Operating System (2014-2017).



May Dongmei Wang is a Wallace H. Coulter Distinguished Faculty Fellow and full professor of Biomedical Engineering, Electrical and Computer Engineering, Computational Science and Engineering at Georgia Institute of Technology (GT) and Emory University (EU). She is Director of Biomedical Big Data Initiative Georgia Distinguished Cancer Scholar, Petit Institute Faculty Fellow, Kavli Fellow, AIMBE Fellow, IAMBE Fellow, IEEE Fellow, and Board of Directors of American Board of AI in Medicine. Her research is in Biomedical Big Data with AI-Driven Intelligent Reality (IR) for predictive, personalized, and precision health (pHealth). She has 20+ years academic professorship and ~4 years industrial research experience, published 290+ articles in referred journals and conference proceedings with

15,000+ Google Scholar citations, and delivered 280+ invited and keynote lectures. Dr. Wang received BEng from Tsinghua University China, and MS with PhD degrees from GT. She is a recipient of GT Outstanding Faculty Mentor for Undergrad Research Award, and EU MilliPub Award (for a high-impact paper that is cited over 1,000 times). At Georgia Tech, Dr. Wang is in 2022 President Leading Women Program and 2021 Provost Emerging Leaders Program. Before 2016, Dr. Wang was Director of Bioinformatics and Biocomputing Core in NIH/NCI-sponsored U54 Center for Cancer Nanotechnology Excellence, and Co-Director of GT Center of Bio Imaging Mass Spectrometry for over 10 years. Dr. Wang is the Senior Editor for IEEE Journal of Biomedical & Health Informatics (J-BHI, Impact Factor 7.02), an Associate Editor for IEEE Transactions for BME and IEEE Reviews for BME, a panelist for NIH CDMA (Clinical Data Management and Analysis) Study Section, NSF Smart and Connect Health, Brain Canada every year. She organized IEEE-JBHI Special Issue on AI driven Informatics, Sensing, Imaging and Big Data Analytics for Fighting the COVID-19 Pandemic. Dr. Wang has chaired IEEE Biomedical and Health Informatics (BHI) community and ACM Special Interest Group in Bioinformatics. Currently, Dr. Wang serves in both IEEE Future Directions Committee and International Academy of Medical and Biological Engineering (IAMBE) Executive Committee and is IEEE-Engineering in Medicine and Biology Society (IEEE-EMBS) Vice President.

Dr. Wang's research has been supported by NIH, NSF, CDC, VA, Georgia Research Alliance, Georgia Cancer Coalition, Shriners' Hospitals for Children, Children's Health Care of Atlanta, Enduring Heart Foundation, Coulter Foundation, Imlay Foundation, Microsoft Research, HP, UCB, and Amazon.

<https://www.linkedin.com/in/may-dongmei-wang-8491379/>



PLENARY KEYNOTE: Thursday July 9

11:00 AM - 12:30 PM

From Testbeds to Valleys of the Wind: Cultivating the Next Generation of Cyber Infrastructure in the Age of Agentic AI

Shinji Shimojo

Shinji Shimojo co-founded SAINT (IEEE/IPSJ Symposium on Applications and the Internet) in 2001 and has since led international research through testbeds including PRAGMA, CENTRA, and the RISE/OpenFlow SDN platform.

Academic communities built the internet's foundations — but the harvest was reaped by commercial platforms. The survival of US Ignite after GENI's closure offers a key lesson: testbeds thrive when connected to communities. As the Supercity Architect for Osaka, the speaker witnessed how smart city platforms, including the Osaka Regional Data Exchange Network (ORDEN), fall into a structural trap — centralized cloud feudalism — where local data sovereignty is surrendered and small communities cannot sustain systems without subsidies. Agentic AI will deepen this divide.

This talk proposes countermeasures rooted in academic tradition: a “local production and local consumption of information” architecture, the MYPLR data marketplace (which holds no actual data, returning sovereignty to citizens), and the role of academic federations such as eduroam in enabling trusted data exchange. Drawing on the “Valley of the Wind” charter — which envisions technology fully harnessed for human coexistence with nature in decentralized, autonomous communities — the talk proposes an Academic Agentic AI Federation as the infrastructure for 1,000 such valleys. Finally, the talk highlights the critical importance of cultivating the next generation who will build this future: through JST ACT-X “Cyber Infrastructure for an AI-Coexistent Society,” of which the speaker serves as Research Director, young researchers across information science, AI, quantum, and social science are forming the human network that will sustain cyber infrastructure for decades to come. Just as one testbed changed the world, the people we cultivate today will build 1,000 Valleys of the Wind tomorrow.



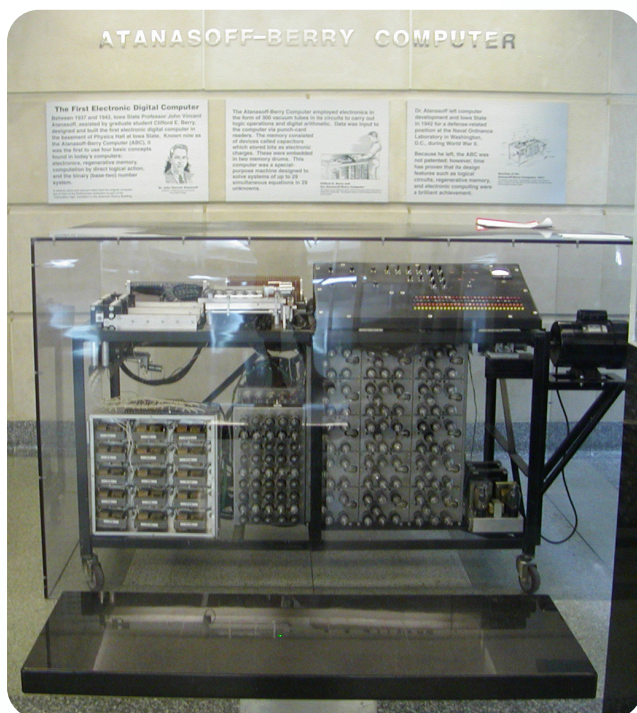
Shinji Shimojo received the M.E. and Ph.D. degrees from Osaka University in 1983 and 1986, respectively. He was an Assistant Professor with the Department of Information and Computer Sciences, Faculty of Engineering Science at Osaka University from 1986, and an Associate Professor with the Computation Center from 1991 to 1998. During this period, he also worked for a year as a Visiting Researcher at the University of California, Irvine. He has been a Professor with the Cybermedia Center (then the Computation Center) at Osaka University since 1998, and from 2005 to 2008 and from 2015 to 2023 had been the director of the Center. He was an executive researcher and a director of the Service Platform Architecture Research Center (SPARC) 2008 to 2011 at the National Institute of Information and Communications Technology from 2008 to 2011. He is a professor at Aomori University. His current research work is focusing on a peer-to-peer communication network, ubiquitous network systems, HPC, HPDA and IoT systems. He is a founding member of PRAGMA and CENTRA. From Aug. 2023, he served a APAN chair. He was awarded the Osaka Science Prize in 2005 and by the Minister of Internal Affairs in 2017. He is a member of IEEE, IEICE fellow, and IPSJ fellow.

PLENARY PANEL: Thursday July 9

3:30 PM - 5:00 PM

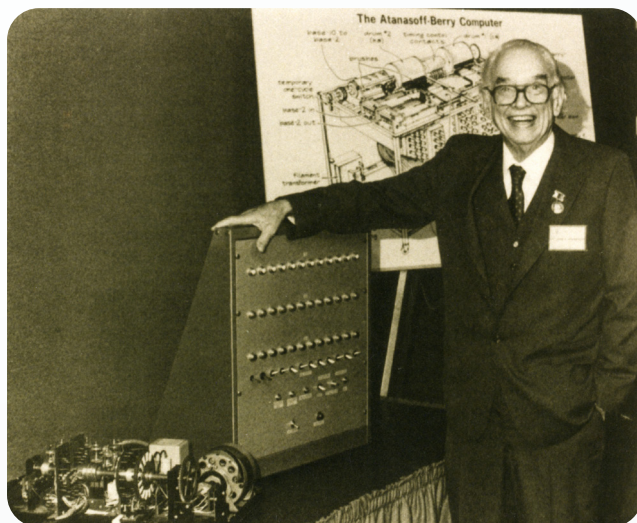
Plenary Panel: Modern Computing in 80 Years – Where We Came From and Where We Are Going

Part of the Symposium on IEEE Computer Society at 80 and IEEE COMPSAC at 50: Legacies of Computing Innovation, celebrating the 80th Anniversary of the Computer Society and the 50th Anniversary of COMPSAC



Between 1937-1941, Iowa State College Professor of Mathematics and Physics John Vincent Atanasoff invented the first modern electronic digital computer, named [Atanasoff-Berry Computer \(ABC\)](#). In 1946, John Mauchly and J. Presper Eckert announced Electronic Numerical Integrator And Computer (ENIAC), touted as the first programmable, general purpose electronic digital computer in the world. Later, through a court case, US District Judge Earl Richard Larson ruled in 1973 that “Eckert and Mauchly did not themselves first invent the automatic electronic digital computer, but instead derived that subject matter from one Dr. John Vincent Atanasoff.”

Many of us were not part of the early days of modern computing, and perhaps never heard of the court case between ABC and ENIAC as explained above. The panel organizer, chair and panelists, with representation spanning several “generations”, from various regions in the world, and possessing intimate personal involvement in and knowledge with key milestones of modern computing, will examine what has happened in the past 80 years, speculate what will be forthcoming on the horizon through our wildest imagination, and discern time-defying laws and principles of modern computing. We invite you to join us in this deliberately produced time tunnel to tour the past and move back to the future of modern computing. We also look forward to your sharing of different perspectives and experiences. Collectively, we hope to have a life-fulfilling time together in Madrid, to help celebrate the [80th anniversary of IEEE Computer Society](#), and to proudly pronounce our exciting venture in modern computing.



Watch the ABC replica in action on

YouTube





Panel Organizer
Carl K. Chang
2004 President
IEEE Computer Society



Panel Chair
Stephen S. Yau
1974-75 President
IEEE Computer Society



Panelist
Jean-Luc Gaudiot
2017 President
IEEE Computer Society



Panelist
Hong Mei
2020-24 President
China Computer
Federation



Panelist
Edmundo Tovar
2021-22 President
IEEE Education Society



Panelist
Dejan Milojicic
2014 President
IEEE Computer Society



Panelist
Hironori Washizaki
2024 President
IEEE Computer Society



**Wednesday July 8
8:00 PM - 10:00 PM
COMPSAC Banquet**



Join fellow COMPSAC 2026 attendees for an unforgettable evening at the conference banquet, to be held on Wednesday July 8 2026, at the renowned La Masía de José Luis, one of Madrid's premier event venues. ***Scan the QR code for the google map to the venue.***

Nestled within the historic Casa de Campo park in the heart of Madrid, La Masía de José Luis combines elegant Mediterranean-inspired architecture, beautiful gardens and terraces, and exceptional Spanish hospitality. The venue is widely recognized for its refined atmosphere, outstanding cuisine, and welcoming spaces designed to foster meaningful conversation and memorable experiences.

The banquet will provide an opportunity for conference participants to relax after a full day of technical sessions, reconnect with colleagues, celebrate achievements, and strengthen professional relationships within the international computing community. Guests will enjoy a carefully curated dining experience featuring contemporary interpretations of traditional Spanish cuisine in a setting that reflects the culture, history, and hospitality of Madrid.

Whether you are renewing longstanding collaborations or meeting new colleagues from around the world, the COMPSAC 2026 banquet promises to be one of the highlights of the conference experience. We look forward to welcoming you for an evening of networking, celebration, and fellowship in one of Madrid's most distinctive venues.





PLENARY KEYNOTE: Tuesday July 7
12L30 - 1:30 PM
Technology Trends, Megatrends,
and Regional Workforce
Dejan Milojicic

AI breakthroughs, such as large language models and agentic AI, are accelerating technological innovations across all industries. Socio-political, economic, and ecological development trump technology advancements and form a complex net of interdependencies. Wars are waged using technology, as are battles in the market, and unfortunately, the impact on nature is not positive. The ability to predict trends, especially megatrends, is essential for business, technology, politics, and daily life. The IEEE Computer Society has been making annual technology predictions for over 25 years. The IEEE Future Directions Committee has been exploring megatrends and the IEEE Industry Engagement the Future of Workforce for over five years. These reports have made a tangible impact on world-wide businesses and education, and they are widely cited and used. In this talk, I will discuss the 2026 Technology Predictions, the 2030 Megatrends, and the Future of Workforce in Africa. I will make recommendations to industry, academia, governments, and professional organizations on how to handle this unprecedented pace of technology development to retain best possible outcomes on humanity.



Dejan Milojicic is an HPE Fellow and VP at Hewlett Packard Labs, Milpitas, CA [1998-present]. Previously, he worked at the OSF Research Institute, Cambridge, MA [1994-1998] and the Institute “Mihajlo Pupin”, Belgrade, Serbia [1983-1991]. He received his Ph.D. from the University of Kaiserslautern, Germany (1993), and his MSc/BSc from Belgrade University, Serbia (1983/86). His research interests include systems software, distributed computing, systems management, and HPC. Dejan has over 300 papers, 2 books, and 100 granted and 75 pending patents. Dejan is an IEEE Life Fellow (Fellow since 2010), ACM Fellow (2025), and HKN and USENIX member. Dejan was on 9 Ph.D. thesis committees, and he mentored over 80 interns. Dejan was president of the IEEE Computer Society (2014), an IEEE presidential candidate in 2019, editor-in-chief of IEEE Computing Now and Distributed Systems Online, and he has served on many editorial boards and TPCs. Dejan led large industry-government-university collaborations, such as Open Cirrus (2007-2011) and New Operating System (2014-2017).



PLENARY KEYNOTE: Friday July 10, 11:00 - 12:30 PM

The Future of Compliance Automation: AI-Driven Assurance for CMMC, ISO 27001, SOC 2, GDPR, CRA and Beyond

Sheikh Iqbal Ahamed

Manufacturing today runs on software as much as on machinery. Factories are adopting connected equipment, cloud systems, and increasingly using artificial intelligence. This brings exposure to threats and obligations that did not exist a generation ago. Cybersecurity compliance has become increasingly important. For many firms, it now decides which contracts they win and which customers they keep. This keynote sets out to make the subject clear and practical rather than intimidating. It explains what cybersecurity compliance actually is, and why it has become central to operational risk. The talk walks through the frameworks now shaping industry — CMMC 2.0 for the U.S. defense supply chain, ISO 27001, SOC 2, GDPR, and Europe's new Cyber Resilience Act(CRA) — and is specific about which are mandatory, for whom, and from when. A manufacturing region like Milwaukee is mostly tied to defense and global supply chains, these deadlines are near, and they fall hardest on the smaller suppliers least equipped to meet them. It also addresses a harder problem directly. The same AI making industry more productive is opening new security gaps faster than people can close them by hand. There are real penalties, measured in millions of dollars and lost contracts, which show what is at stake. Finally, the keynote introduces UbiComply, a platform built from NIH-funded research. This platform maps more than 1,000 controls to the NIST framework and produces audit-ready evidence from an organization's own code, systems, and policies. UbiComply ensures that trust need no longer depend on fear and guesswork.



Sheikh Iqbal Ahamed, PhD, is the Wehr Professor of Computer Science and Founding Chair of the Department of Computer Science at Marquette University, USA. He received his PhD in Computer Science and Engineering from Arizona State University, specializing in mobile and pervasive computing. Dr. Ahamed is an internationally recognized researcher whose work spans artificial intelligence, digital health, ubiquitous computing, cybersecurity, privacy, and machine learning. He develops intelligent, non-intrusive technologies for healthcare applications, including stress, emotion, pain, hemoglobin level, and behavioral monitoring. His innovations have supported smoking cessation, cancer care, suicide prevention, autism support, palliative care, and high-risk behavior management. He founded and directs the UbiComp Research Laboratory at Marquette University, where he has graduated more than 30 PhD and 50 MS students. He has published over 300 peer-reviewed articles and secured more than \$10 million in research funding. His work has earned fourteen Best Paper and Best Poster awards, including the 2022 and 2023 Best Paper Awards from Elsevier's Smart Health journal. In 2025, Stanford University recognized him among the world's top 2% scientists in Artificial Intelligence, Image Processing, and Software Engineering. Dr. Ahamed serves as the Standing Committee Chair of IEEE COMPSAC and is the founder of UbiComply AI, an AI-driven compliance automation company.



TUESDAY JULY 7

9:00 AM – 10:30 AM

Symposium on Applied Artificial Intelligence (AAI) - Session 1

Location: Room 26

Session Chair: San Murugesan, BRITE Professional Services

AAI - Full - 3693 - H-RLPOI: A Hybrid LLM and Reinforcement Learning Framework for Next POI Recommendation - Zahra Hamdani, Saloua Zammali and Sadok Ben Yahia

AAI - Full - 3502 - Cost and accuracy of long-term memory in Distributed Multi-Agent Systems based on Large Language Models - Benedict Wolff and Jacopo Bennati

AAI - Full - 3193 - Agent-Orchestrated Federated Representation Learning for Non-IID Data - Lei Yao and Tian Zhao

AAI - Full - 5909 - On the Edge of Tomorrow: A Validated Blueprint for Deploying Federated Learning on Industrial Edge Hardware - Emil Johansson, Jan Bosch and Helena Holmström Olsson

AAI - Full - 2307 - MANA (Modular Agentic NoSQL Architecture): Robust NL-to-NoSQL Querying at Enterprise scale - Saiteja Tallam, Rajesh Gupta Mummidiseti, Pratyusha Rasamsetty and Deepak Kumar

AAI - Full - 9130 - Few-Shot LLMs as Synthetic Tabular Data Generators - Hadi Koubeissy, Michel El Khoury, Marc Kamradt and Abdallah Makhoul

Symposium on Software Engineering Technologies & Applications (SETA) - Session 1

Location: Room 24

Session Chair: Jacky Keung, City University of Hong Kong

SETA - Full - 0967 - Refuting Infeasible Paths for False Alarm Reduction - Jianbo Chen, Yuanmin Xie, Zheng Zeng, Ran Zhang, Jianping Tang and Min Zhou

SETA - Full - 0086 - Predicting Acceptance and Review Effort in Human and Agent Pull Requests - Kartik Ghanshyambhai Pansuriya, Ehsan Ghorbani, Deepak Singh and Eman Abdullah Alomar

SETA - Full - 2269 - Cross-Layer Heterogeneous Information Integration and Representation for Web Vulnerability Analysis using LLM and Static Analysis - Jia Wang Jiang, Yong Liu, Chao Jie Dai, Jia Xue Song and Wei Wei Wang

SETA - Full - 7977 - Detecting Software Requirements Smells Through Domain-Augmented Generation - Orhun Aysan, Giray Akyol and Eray Tüzün

SETA - Full - 8586 - PR-Aware Automated Unit Test Generation: Challenges and Opportunities - Vahid Haratian, Atakan Akar, Berk Çakar and Eray Tüzün

Symposium on Security, Privacy, & Trust in Computing (SEPT) - Session 1

Location: Room 23

Session Chair: AKM Jahangir Majumder, University of South Carolina Upstate

TUESDAY JULY 7

SEPT - Full - 4281 - A Blockchain-based Copyright Governance Framework for AIGC Content with Perceptual Hashing Tracing - Zhaoxiong Meng, Rukui Zhang, Bin Cao, Meng Zhang, Yajun Li, Huhu Xue and Meimei Yang

SEPT - Full - 5612 - Condition-Triggered Verifiable Credential with Notary-Controlled Message Appending - lifan Tyou and Kanta Matsuura

SEPT - Full - 7722 - Understanding Stylistic and Syntactic Backdoor Attacks in Text Classification - Omer Faruk Atasoy, Emirhan Elibol, Ayten Dilara Yavuz and M. Emre Gursoy

SEPT - Full - 9678 - SVEvote: Scalable, Secure and Verifiable E-Voting - Ali Allami, Alexander Esser and Dan Lin

SEPT - Full - 4354 - Trust-Aware Client Scoring in Federated Learning via Contrastive Attention and Representation Clustering - Reza Sarkhosh, Sadok Ben Yahia, Christian Esposito and Aiman Faiz

Symposium on Data Sciences, Analytics & Technologies (DSAT) - Session 1

Location: Room 22

Session Chair: Kathy Grise, IEEE Future Directions

DSAT - Full - 3825 - Explainable Multi-Omic Machine Learning Framework for predicting Drug Response in Breast Cancer - Deepa Kumari

DSAT - Full - 5000 - Semantic Governance Paradigm of Heterogeneous World Models for Agentic AI Systems - Silvio Angonese and Renata Galante

DSAT - Full - 1656 - Risk Is Not the Target: A Monotonic Framework for Evaluating Wildfire Operational Risk Signals - Nicolas Caron, Christophe Guyeux, Hassan Noura, Benjamin Aynes and Maxime Coulmeau

DSAT - Full - 8664 - DidData: A Trust-Aware Protocol for Sovereign AI Data Supply Chains - Yang Liu, Tongtong Cheng, Zihang Yin and Yuanchao Liu

DSAT - Full - 0343 - Learning Operating Regimes from Experimental Data in Optical Feedback Systems - Başak Ersöz, Priyanka Chaudhary, Maurizio Dabbicco, Massimo Brambilla, Lorenzo Columbo and Paolo Bardella

DSAT – COMPSAC 2026 - Short - 7126 - Engineered miRNA Feature–Driven Machine Learning Models for Risk Stratification in Lung Adenocarcinoma - Shruti Agrawal and Pralay Mitra

Symposium on Blockchain (BEST) - Session 1

Location: Sala Torres Quevedo

Session Chair: Stelvio Cimato, University of Milan

BEST - Full - 2935 - Scalable Blockchain-based Healthcare Consent Management with Automated Compliance Verification - Suraj Gupta, Gwen Salaün, Frédéric Lang and Umar Ozeer

BEST - Short - 8505 - Proof of Proximity: A Fair and Energy-Efficient Consensus Mechanism for Blockchain-Based IoT and Edge Networks - Nuran Ranawaka, Sahan Gawesh, Githmi

TUESDAY JULY 7

Sundarasekara, Kalangi Jayakody, Pramitha Fernando, Chatura Seneviratne and An Braeken

BEST - Short - 3172 - Beyond Rollback: Error Semantics for Irrevocable State Transitions in Decentralized Finance - Ahmed Twabi, Yepeng Ding and Tohru Kondo

Symposium on Computer Architectures & Platforms (CAP) - Session 1

Location: Room 14

Session Chair: Cristina Seceleanu, Mälardalen University

CAP - Full - 1315 - SkyForest: Parallelizing Random Forest Inference on Skyrmion Racetrack Memory - Yi-Hsun Huang and Tseng-Yi Chen

CAP - Full - 0177 - Dataflow-Oriented Classification and Performance Analysis of GPU-Accelerated Homomorphic Encryption - Ai Nozaki, Takuya Kojima, Hiroshi Nakamura and Hideki Takase

CAP - Full - 8051 - An Integrated Optimization Framework with AI-Enhanced Methods for Embedded SD NAND - Yunhe Fu and Chun Bun Henry Chan

CAP - Short - 1176 - Performance Characterization of LLM Inference under Limited GPU Resources - Madoka Takato, Akira Hirai, Reika Kinoshita, Masahiro Miwa and Masato Oguchi

Symposium on IT in Practice (ITiP) - Session 1

Location: Sala Verde

Session Chair: Charalampos Patrikakis, University of West Attica

ITiP - Full - 1121 - Context-Aware Enhancements for Dimension-Preserving Invertible Neural Models in Traffic Matrix Estimation - Grigorios Kakkavas, Petros Maratos, Vasileios Karyotis, Anastasios Zafeiropoulos and Symeon Papavassiliou

ITiP - Full - 1899 - Developing Robust and Reproducible Machine Learning Systems - Ioanna Polychronou, Grigorios Nikolaou and Charalampos Patrikakis

ITiP - Full - 6443 - Gait-Diverse Avatar Selection for Realistic Synthetic Crowds in the Metaverse - Theofanis Raptis and Tamoghna Ojha

ITiP - Full - 2738 - A Federated Learning Approach Towards Cross-Architecture Ransomware Detection Using Low-Level Hardware Information - Chutitep Woralert and Chen Liu

ITiP - Short - 5143 - Quantization at the Edge: Evaluating Inference Performance and Quality for SLM Driven Conversational Agents in Virtual Worlds - Louis Nisiotis and Nikita Markov

ITiP - Short - 7478 - VRadioSim: A GPU-Based Ray Tracing Simulator for Real-Time Wireless Propagation Visualization in Virtual Reality - Louis Nisiotis and Marios Raspopoulos

ITiP - Short - 8785 - Artifact-Constrained Agentic Testing for Black-Box System Testing under Actuarial and Regulatory Constraints - Hi Kuen Yu, Jacky Keung, Rachel Samantha Chandra, Yicheng Sun, Yihan Liao, Man On Wong and Xiaoxue Ma

TUESDAY JULY 7

2nd IEEE International Workshop on Intelligent Tools for Accessibility – Technologies Transforming the Future of Inclusive Solutions (ITA) - Session 1

Location: Room 46

Session Chair: Fabrizio Soares, Universidade Federal de Goiás

ITA 2026 - Workshop - 9197 - AI Navigo: Innovative Wearable for Visual Assistance - Asvini Thivakaran and Vani Kandasamy

ITA 2026 - Workshop - 9718 - From Passive Viewing to Active Participation: An AR Visualization and Interaction System for Enhanced Spectator Experience in Sports - Bingwen Tong, Chi Li, Yuan Jiang, Junbin Zhao, Shaoyang Jing, Haowen Dai, Nazia Anwar, Dave Towe and Laura-Jane Filotrani

ITA 2026 - Workshop - 9125 - Vision-Based Air-Writing for Mobile Braille Input: A Real-Time Assistive Approach - Luan Melo, Thamer Nascimento, Luciana Cardoso, Marcos Lajovic Carneiro, Deborah Fernandes, Juliana Felix and Fabrizio Soares

ITA 2026 - Workshop - 9592 - Driven Structured Audio Generation: An Automated Solfège Support System for Visually Impaired Students - Eduardo Amorim, Thamer Nascimento, Afonso Ueslei Fonseca, Cristiane Ferreira, Reyes Juarez-Ramirez, Juliana Felix and Fabrizio Soares

ITA 2026 - Workshop - 7248 - Expanding WCAG Success Criteria Testing Coverage with Browser-Native AI - Shauna Keating and Vanessa Maike

eHealth-IoT 2026 - Workshop - 0126 - Exploring Women's Perceptions of Mobile and Wearable Reminder Technologies for Supporting Contraceptive Adherence in the Context of Teratogenic Medication Risk - Adriano Galati and Florian Bruehlmann

10:30 AM – 11:00 AM

Coffee Break

Location: First Floor Hall

11:00 AM – 12:30 PM

Opening discussion by COMPSAC General Chairs (11:00 - 11:30)

Edmundo Tovar, Universidad Politécnica de Madrid

Javier Soriano, Universidad Politécnica de Madrid

Plenary Keynote: *From Retrospection to Prospection:*

50 Years of COMPSAC and the Road Ahead

Sorel Reisman, California State University

Location: Auditorium (Salón de Actos)

12:30 PM – 1:30 PM

Lunch Break

1:30 PM – 3:00 PM

Student Research Symposium (SRS) - Session 1

Location: Room 24

Session Chair: Ryo Nakamura, Fukuoka University

TUESDAY JULY 7

SRS 2026 - SRS - 2102 - How Much Does Privacy Cost? Evaluating Differential Privacy for ML based VR Gaze and Head Tracking - Mohammed Yusufi, Nazmus Shakib Shadin, Md Mushfique Hossain, Xinyue Zhang and Rifatul Islam

SRS 2026 - SRS - 6748 - A Visual and Language Grounding Framework for Visually Impaired People - Aela Le Sommer, Christophe Lohr and Panagiotis Papadakis

SRS 2026 - SRS - 7453 - Physics-Integrated Contrastive Learning for Trustworthy Cross-Region Landslide Prediction - Ren Ozeki, Hamada Rizk and Hirozumi Yamaguchi

SRS 2026 - SRS - 5668 - A Risk Scoring Mechanism for External Attack Surface Management (EASM) - Suman Chakraborty and Shuvo Bardhan

SRS 2026 - SRS - 6195 - Deconstructing Extended Reality Attacks: Deriving Common Attack Primitives and Analyzing Their Feasibility - Kousei Otsuka, Yusuke Suzuki, Mayu Fujita, Shodai Kurasaki, Ryota Mori, Akira Kanaoka, Toshihiro Ohigashi and Tetsushi Ohki

SRS 2026 - SRS - 2493 - Towards Low-Latency E2EE for Spatial Communication: Requirements and Empirical Evaluation in VR Environments - Hina Terou, Shodai Kurasaki and Akira Kanaoka

SRS 2026 - SRS - 0661 - A Context-Aware Platform for Evaluating LLM-Generated Backend Applications - Muhammed Suphi Şeyhkuruş and Tolga Ovatman

Symposium on Applied Artificial Intelligence (AAI) - Session 2

Location: Room 26

Session Chair: San Murugesan, BRITE Professional Services

AAI - Full - 8728 - Image Segmentation of Consumer Products Using Agentic AI - Andrew Dunton and Mohammad Masum

AAI - Full - 9311 - Saliency-guided knowledge distillation for driver-aware salient object detection - Roksana Yahyaabadi and Soodeh Nikan

AAI - Full - 1047 - I can see how you feel: A Real-time Visual-Signal-Based Emotion-Aware AI Agent - Likang Jiang and Dan Lin

AAI - Full - 9238 - SiliconMind-V1: Multi-Agent Distillation and Debug-Reasoning Workflows for Verilog Code Generation - Mu-Chi Chen, Yu-Hung Kao, Po-Hsuan Huang, Shao-Chun Ho, Hsiang-Yu Tsou, I-Ting Wu, En-Ming Huang, Yu-Kai Hung, Wei-Po Hsin, Cheng Liang, Chia-Heng Tu, Shih-Hao Hung and Hsiang-Tsung Kung

AAI - Short - 7545 - Leveraging Mono-Modal Data to Generate Multimodal Representations for Industrial Anomaly Detection - Charbel El Achkar, Abdallah Makhoul and Joseph Azar

AAI - Short - 7907 - Identification Clutch Pressure Plate Types Using Computer Vision - Bruna Carneiro Machado, Marcos Lajovic Carneiro, Juliana Felix and Solange da Silva

Symposium on Software Engineering Technologies & Applications (SETA) - Session 2

Location: Room 23

Session Chair: Ross Arnold, US Army Devcom

TUESDAY JULY 7

SETA - Full - 2949 - R2Code: A Self-Reflective LLM Framework for Requirements-to-Code Traceability - Yifei Wang, Jacky Keung, Xiaoxue Ma, Zhenyu Mao, Kehui Chen and Yishu Li

SETA - Full - 9780 - A Comprehensive Study of Build Failures in Real-World RISC-V Software Packages on Build Platforms - Fujie Zhou and Hui Li

SETA - Full - 8759 - Beyond Test Presence: Assessing the Quality and Robustness of Agent-Generated Tests in Open-Source Projects - Preet Jhanglani, Zeel Kaushal Desai, Vidhi Kansara and Eman Abdullah Alomar

SETA - Full - 1085 - SCLAT: An LLM-Interpretable User Story Quality Evaluation Framework - Zhen Ma, Chunhui Wang, Tong Li, Zhiguo Liu and Ye Zhai

Symposium on Smart & Connected Health (SCH) - Session 1

Location: Room 22

Session Chair: Alfredo Cuzzocrea, University of Calabria

SCH - Full - 4084 - ADHDPulse: A Smartphone-Based Approach to Monitor ADHD Symptom Improvement and ADHD Symptom Levels Prediction - Shweta Ware, Allison Baun, Caleb Kwakye, Ethan Swift, Sofia Dimotsi, Peiyi Wang, Nikoloz Gvelesiani and Laura E. Knouse

SCH - Full - 8132 - Cross-Modal Knowledge Distillation from CT to Radiograph for Diagnostic Triage in Resource-Constrained Healthcare - Elena Opait, Maria Ecaterina Olariu and Adrian Iftene

SCH - Short - 4988 - From Reactive to Predictive Smart Home Health Monitoring: Humidity Dynamics of Indoor Laundry Drying Under Contrasting Ventilation Strategies - Catherine Hill, Samira Awwal, Yomna El Saboni, Jasmine Tolson, Rakesh Mishra and Leigh Fleming

Symposium on Human Computing & Social Computing (HCSC) - Session 1

Location: Sala Torres Quevedo

Session Chair: AKM Jahangir Majumder, University of South Carolina Upstate

HCSC - Short - 8154 - Automated Comic Book Translation for Linguistic Accessibility in Early Childhood Education: Usability and Pedagogical Evaluation - Thamer Nascimento, Camila Horbylon, Deborah Fernandes, Juliana Felix and Fabrizio Soares

HCSC - Full - 3514 - Granular Feedback in Human-AI Interaction: Exploring Trade-offs in Ambient Intelligence - K  vin Delcourt, Mathieu Renard, Sylvie Trouilhet and Jean-Paul Arcangeli

HCSC - Full - 6218 - The Trust Gap in Agentic Search: How Verbal-Imagery Cognitive Styles Shape Behavioral Signals and AI Acceptance - Huimin Tang, Yuhan Zhang, Alejandro Guerra Manzanares, Boon Giin Lee, Dave Towey, Max L. Wilson and Matthew Pike

HCSC - Short - 8552 - From Moral Gatekeeping to Social Autopilot: Revealing the Normative Substitution Paradox in AI Delegation - Yasser Alhelaly and Afshin Ashofteh

HCSC - Short - 8720 - Making Sense of Scams: Understanding Scam Conversations Through Multi-Level Alignment - Zhenyu Mao, Jacky Keung, Xiangyu Li, Yicheng Sun, Kehui Chen, Jingyu Zhang and Jialong Li

TUESDAY JULY 7

Symposium on Networks, Communications, Internet & Web Technologies (NCIW) - Session 1

Location: Room 14

Session Chair: Ali Hurson, Missouri University of Science and Technology

NCIW - Full - 5452 - HEAR: A Harmonial Model of External Attention and 1D-Resnet for Network Traffic Classification towards Agentic AI - Chang-Yui Shin, Tae-Woong Kwon, Ui-Jun Baek and Jun Lee

NCIW - Full - 6289 - Data-Driven Optimization of IEEE 802.1Qcr Asynchronous Traffic Shaper Parameters for Automotive Networks - Taisei Isobe, Han Nay Aung, Yasuhiro Yamasaki and Hiroyuki Ohsaki

NCIW - Full - 2227 - Modeling and Analysis of 10Base-T1S Network with IEEE 802.1Qav Traffic Shaping - Taiki Nonaka, Han Nay Aung, Yasuhiro Yamasaki and Hiroyuki Ohsaki

NCIW - Full - 5064 - RACE: Recovery Analysis for Cascading Events in Complex Networked Systems - Sanfan Liu, Sahra Sedigh Sarvestani and Ali R. Hurson

NCIW - Full - 0848 - Demand-Aware Identification of High-Fidelity Link Sets in Quantum Networks - Shun Yamachika, Yuto Kakiyama, Shota Inoue and Hiroyuki Ohsaki

NCIW - Full - 5333 - Adaptive Step Size Control for Accelerating Token-Based Flow-Level Network Simulation - Shota Inoue, Yoshiteru Taira and Hiroyuki Ohsaki

Symposium on Cognitive Robotic Systems (CRoS) - Session 1

Symposium on Security, Privacy, & Trust in Computing (SEPT) - Session 4

Location: Sala Verde

Session Chair: Farhana Zulkernine, Queen's University, Canada

CRoS - Full - 0669 - Adaptive MAD-Based Bipolar Spike Encoding for IR-UWB Radar Gesture Recognition Using Liquid State Machines - Ahmed Khalil Mezali, Ibrahim Kakouche, Abdelmadjid Maali and Mohamed Salah Azzaz

CRoS - Full - 3708 - Optimization of Face-Gait Person Identification Pipelines for Edge-Deployed Cognitive Agents - Federico Boscolo, Grazia De Mola and Fabrizio Lamberti

CRoS - Short - 5230 - ElderBench: Benchmarking Personalized Open-Source LLMs for Older Adults - Amir Eskandari, Jing Tao, Farhana Zulkernine, Michele Morningstar, Jordan Poppenk and Björn Herrmann

SEPT - Full - 8291 - Detecting Voice Conversion Attacks Using Self-Supervised, Handcrafted, and Hybrid Audio Features - Najib Abou Nasr, Abdullah Almutairi, Mohannad Attia, Ibrahim Daoud, Yasmin Alfares, Hoda Elsayed, Muhammad Umair Khan and Anis Koubaa

SEPT - Short - 5940 - CodeLLM-Auth: Multimodal Authorship Attribution and Verification via Supervised Contrastive Code Embeddings - Anas Alsobeh, Samer Khamaiseh, Dylan Middendorf and Jack Dziubinski

SEPT - Short - 0894 - Data-Constrained File Fragment Classification across Heterogeneous File Types using Large Language Models - Honghe Zhou, Weifeng Xu, Josh Dehlinger, Suranjan

TUESDAY JULY 7

Chakraborty and Lin Deng

Fast Abstracts (FA) - Session 3

Location: Room 46

Session Chair: Michiharu Takemoto, IPUT

FA - FA - 0496 - InterlaceProximity: Proximity-Aware and Fault-Tolerant Backup Node Selection in Skip Graphs Toward Smart City Infrastructures - Takuya Suzuki and Michiharu Takemoto

FA - FA - 3002 - GenAI-Driven Transformation of ICT Continuing Education Program: A Case Study of “Smart SE” - Hironori Washizaki, Shoichi Okazaki, Kazunori Sakamoto and Satoshi Okuda

FA - FA - 3197 - Unveiling the Drivers of Developer Satisfaction: Causal Inference Perspective - Kokoro Hidari, Harei Shirao, Hironori Washizaki, Naoyasu Ubayashi, Kenji Matsuoka, Takuma Adachi and Akihiro Mitsui

Fast Abstracts(FA) - FA - 8444 - Toward Trustworthy Survival Analysis Modeling - Armand Bandiang Massoua, Mohamed Bouguessa and Abdoulaye Banire Diallo

FA - FA - 4497 - A Study on Estimating Network Properties under Social Learning Using Partially-Observed Topology - Ryotaro Matsuo and Ryo Nakamura

FA - FA - 4828 - Resource-Explicit Goal-Oriented Modeling of Multi-Agent Systems - Elena Troubitsyna

FA - FA - 8035 - Perceived Stress and Quality of Sleep in Relation to Internet Addiction Among Female Undergraduate Health Sciences Students in the UAE - Sawsan Abuhammad, Amira M Ali, Athoub Hasan, Zainab Ahmed, Zahra Doudi, Alaa Alhakim and Abdelaziz Hendy

FA - FA - 8463 - LLM-based framework for semantic synchronization across multiple models in MDE - Naoki Ando, Aditya Sundar, Hironori Washizaki, Naoyasu Ubayashi and Hiroki Ito

3:00 PM – 3:30 PM

Coffee Break

Location: First Floor Hall

3:30 PM – 5:00 PM

Research Projects Exhibition (RPE)

Location: Room 24

Session Chair: Massimiliano Garda, University of Brescia

SSRPE - COMPSAC 2026 - Short - 6116 - The ECEAAS Project: Supporting Healthy, Autonomous and Active Aging through Cognitive Environments - Edgar Batista, Fran Casino, Agusti Solanas and Antoni Martínez-Ballesté

SSRPE - COMPSAC 2026 - Short - 3133 - LEASARD: Low-Energy deep neural networks for Autonomous Search-And-Rescue Drones - Panagiotis Papadakis, Isabelle Fantoni, Jean-Philippe Diguët and Matthieu Arzel

TUESDAY JULY 7

SSRPE - COMPSAC 2026 - Short - 0313 - PANACEA: A Model-Based Framework for Self-Protecting Systems - Stefano Iannucci, Emiliano Casalicchio, Francesco Guerra, Sara Pederzoli, Matteo Paganelli, Tommaso Caiazzzi and Simone Albero

SSRPE - COMPSAC 2026 - Short - 6568 - THREAD: Intelligent Systems for Real-time Embroidery Capture and AI-Assisted Design - Eliot Bytyçi, Edlira Martiri, Zanita Halimi, Zorica Karapancheva, Blerina Vika, Mila Dodevska, Gloria Tyxhari and Biljana Stojkoska

SSRPE - COMPSAC 2026 - Short - 7839 - DECICE: AI-Driven Scheduling and Digital Twin Integration for the Cloud-HPC-Edge Compute Continuum - Aasish Sharma and Julian Martin Kunkel

SSRPE - COMPSAC 2026 - Short - 7895 - KiMeKo: A Collaborative AI Platform for Medical Device Development - Martin Leucker, Alexander Schläfer, Frank Ückert, Christoph Lüth, Philipp Rostalski, Thomas Martinetz, Nihat Ay, Thomas Kirste, Lars Kaderali and Serge Autexier

SSRPE - COMPSAC 2026 - Short - 8038 - Interactive Medical Image Diagnosis with Chatbot Assistance - Essam Rashed, Ahmed Elboardy, Yiming Jia, Mina Yousef, Ziad Elshaer and Ghada Khoriba

SSRPE - COMPSAC 2026 - Short - 1487 - CloudSkin: AI-based Learning Plane for Autonomic Management in the Cloud-Edge Continuum - Peini Liu, Joan Oliveras Torra, Marc Palacín, Ramon Nou, Josep Lluís Berral-García and Jordi Guitart

SSRPE - COMPSAC 2026 - Short - 9632 - Internet of Realities: Toward a Trust-Centered Software Infrastructure for Creating and Connecting Diverse Realities - Takuro Yonezawa, Akira Kanaoka, Soko Aoki and Manabu Tsukada

SSRPE - COMPSAC 2026 - Short - 3141 - The Zero Trust IoT (ZT-IoT) Project - Atsuko Takefusa, Atsushi Igarashi, Taro Sekiyama, Kuniyasu Suzuki, Toshihiro Matsui, Jie Yin, Atsuya Osaki, Naoki Yamashita, Nobuo Aoki, Sewon Park, Terunobu Inaba, Lelio Brun, Yutaka Ishikawa, Kento Aida, Yasushi Ono, Kensuke Fukuda, Eisaku Sakane and Ichiro Hasuo

SSRPE - COMPSAC 2026 - Short - 1308 - The Wave Platform a LCNC Platform for Communities of Research - Tiziana Margaria, Sean O'Brien, Marco Krumrey, Daniel Sami Mitwalli, Salim Saay and Sebastian Teumert

SSRPE - COMPSAC 2026 - Short - 4245 - Project PADIN: A Dual-Purpose Federated Learning Infrastructure for Community-Based Dental Care and Disaster Victim Identification - Yuta Seino, Siriwan Suebnukarn and Kazunori Nozaki

SSRPE - COMPSAC 2026 - Short - 9027 - Digitalizing Advanced Manufacturing: Platform Research, Industry Exemplars and AI-Driven Process Control at I-Form - Cathal Hoare, Denis Dowling and Tiziana Margaria

Symposium on Applied Artificial Intelligence (AAI) - Session 3

Location: Room 26

Session Chair: Dave Towey, University of Nottingham Ningbo China (UNNC)

AAI - Full - 8926 - Evaluating CUDA Tile for AI Workloads on Hopper and Blackwell GPUs - Divakar Yadav, Tian Zhao and Deepak Kumar

AAI - Full - 9659 - Toward Standardized Evaluation of Metamorphic Relations: A Structured Rubric and Human-LLM Comparison - Yifan Zhang, Dave Towey, Matthew Pike, Quang-Hung Luu Luu, Huai Liu and Tsong Yueh Chen

AAI - Full - 4706 - Two Minds Are Safer Than One: Argumentative LLM Agents for Clinical Diagnosis - Belkacem Chikhaoui

AAI - Full - 9096 - Energy-Efficient LLM Inference with SLA-Constrained Adaptive GPU Power Capping - Alex Trajano, Crislane Costa, Francisco V J Nobre and Rafael L Gomes

AAI - Full - 3221 - Decentralized Knowledge Distillation for Remaining Useful Life Prediction: A Case Study on Turbofan Jet Engines degradation - Mbasa Joaquim Molo, Lucia Vadicamo, Emanuele Carlini, Claudio Gennaro, Witesyavwirwa Vianney Kambale and Kyandoghene Kyamakya

AAI - Short - 7662 - FETRA: A Federated Transformer with Dynamic Attention Model for Energy Forecasting in IoBT - Jessica Al Achy, Hassan Harb and Abdallah Makhoul

Symposium on Software Engineering Technologies & Applications (SETA) - Session 3

Location: Room 23

Session Chair: Yasmeen Rawajfih, Tuskegee University

SETA - Full - 4885 - HGARena: Budgeted Test-Driven Multi-Agent Repository Issue Resolution with Heterogeneous Graph-Augmented Retrieval - Yuchen Cao, Jacky Wai Keung, Yicheng Sun, Yifei Wang and Zhenyu Mao

SETA - Full - 9255 - From Architectural Descriptions to Executable Software Models with Environmental and Scenario Dynamics - Tales Viglioni, Jair Leite, Thais Batista, Flavio Oquendo, Everton Cavalcante and Éder Xavier

SETA - Full - 1207 - From Simulation to Verification: A Flexible Interface for Scenario Description in Autoware Autonomous Driving Ecosystem - Duong Dinh Tran, Peter Riviere, Takashi Tomita and Toshiaki Aoki

SETA - Short - 4347 - Stepwise PCTL Generation with Closed-Loop Validation for Automated SysML Activity Diagram Verification - Jia Xu, Lei Yu, Peng Wang, Li Yang, Changzhi Deng, Dongxing Teng, Yusheng Liu and Fengjun Zhang

SETA - Short - 4642 - Coarse-Fine-Grained Automatic Modeling Method for Rust Features based on HCPN - Lei Shi, Tao Sun and Wenjie Zhong

SETA - Short - 0939 - Cloud-Native Scalable Localization: A Serverless CI/CD Framework for Multilingual Software Delivery - Neeraj Kumar Sharma, Pranav Dilip Mate, Sandeep Kanchan Pandit, Pritam Kar, Subhrakanta Panda and Lalita Bhanu Murthy Netia

Symposium on Data Sciences, Analytics & Technologies (DSAT) - Session 2

Location: Room 22

Session Chair: Louis Nisiotis, UCLan Cyprus

DSAT - Full - 6463 - Anomaly Detection for Customer Data Profiling and Behavioral Dynamics in Banking Regulatory Reporting - Axel Hippolite, Faiza Loukil, Amandine Bellenger and Kavé Salamatian

DSAT - Full - 7201 - A Comparative Study of Deep Compound Representations for Classifying Carcinogenicity - Iuri Pereira, Jurandir Silva, Eloisa Caldas and Rogerio Salvini

DSAT - Full - 3057 - Don't Swap Horses in Midstream: a Centralization Study of Uniswap on Ethereum - Matteo Loporchio, Damiano Di Francesco Maesa and Laura Ricci

DSAT - Full - 7691 - Predictive Churn Analysis in a Payment Fintech Using Machine Learning and Neural Networks - Arthur Costa, Pedro Soares, Gustavo Vinhal, Fabrizio Soares and Juliana Felix

DSAT - Short - 6296 - MOS in Current Voice Conversion Research: Usability and Interpretability - Karla Schäfer and Jeong-Eun Choi

DSAT - Short - 8021 - E-AGMatch: Schema Matching Approach Guided by an Agentic Prompt for ETL Automation - Ahlem Ben Youness, Chaima Kachroud, Laila Ben Ayed and Baha Eddine Kalai

Symposium on Blockchain (BEST) - Session 2

Location: Sala Torres Quevedo

Session Chair: Laura Ricci, Università degli Studi di Pisa

BEST - Full - 0850 - Hybrid Local-Cloud Storage Optimization for Blockchain-based IoT Systems - Wei Yang, Xiaohua Wu, Yichang Chen, Junkai Liao, Wei Chen and Leyuan Liu

BEST - Full - 3088 - Dual Knowledge Graph Retrieval-Augmented Smart Contract Vulnerability Detection - Yan Zheng, Yang Zhou, Yi Chen Wang, Ying Shang and Yong Liu

BEST - Short - 3504 - EigenFL: An EigenLayer-Restaked Blockchain Solution for Secure Federated Learning - Giovanni Maria Cristiano, Salvatore D'Antonio and Giovanni Mazzeo

BEST - Short - 5476 - Accountable Fair Exchange Protocols on Blockchain - Riku Mochizuki, Ryosuke Abe and Shigeya Suzuki

BEST - Short - 4737 - An Elastic Multi-Instance DID Architecture via Layer 2 Scaling for Web3.0 Identity Services - Yang Liu, Yuanchao Liu and Zihang Yin

Symposium on Networks, Communications, Internet & Web Technologies (NCIW) - Session 2

Symposium on Data Sciences, Analytics & Technologies (DSAT) - Session 3

Location: Room 14

Session Chair: Sahra Sedigh Sarvestani, Missouri University of Science & Technology

NCIW - Full - 9014 - On the Robustness of Traveling Networks: Quantifying Operability, Observability, and Controllability and Designing Self-Healing Mechanisms - Keito Yokoyama, Kazuma Aoyama, Shota Inoue and Hiroyuki Ohsaki

NCIW - Full - 1091 - On the Robustness of Bimodal Congestion Control against Inconsistent Explicit Feedback - Hidetaka Doen, Han Nay Aung and Hiroyuki Ohsaki

NCIW - Short - 9811 - CUBIC++: Empirical Fine Tuned CUBIC - Motoyuki Ohmori, Takeshi Ikenaga, Kohichi Ogawa and Hiroki Kashiwazaki

NCIW - Short - 9343 - Realization of Application-aware Networking by Using Information-Centric Networking - Yuki Hashimoto, Manato Fujimoto and Shingo Ata

DSAT - Short - 4777 - FEDA: Fast Exponential Decay Approach for Multivariate Time Series Forecasting - Ming-Ting Zhong, Cheng-Yu Xie and Che-Rung Lee

DSAT - Short - 4306 - Analytical Visualization of Geographical Data for Post-Wildfire Growth of Fuel Types in Canada - Abdul Mutakabbir, Chung-Horng Lung, Marzia Zaman, Kshirasagar Naik, Richard Purcell, Srinivas Sampalli and Thambirajah Ravichandran

DSAT - Short - 3843 - A Cost Model for Edge-Local Log Querying: Decomposing Cloud Logging Expenditure and Evaluating Architectural Alternatives - Florin Olariu, Ionut Feraru and Lenuta Alboaie

Workshop on Knowledge Graphs for RAG and Textual Document Analysis (Doc2KG) - Session 1

IEEE International Workshop on Quality Oriented Reuse of Software (QUORS) - Session 1

Location: Sala Verde

Session Chairs: Karima Boutalbi, Cegedim Business Services, Rim Hantach, Center of Expertise – Data to Decision, ENGIE France

Doc2KG 2026 - Workshop - 3939 - Ontology-Free Biomedical Knowledge Graph Induction (OF-Bio-KG) - Ahlem Ben Younes, Baha Eddine Kalai, Leila Ben Ayed and Chaima Kachroud

Doc2KG 2026 - Workshop - 6378 - Full paper: CoverageRAG: Transparent Multi-Entity Comparative Reasoning via Knowledge Graph-Enhanced RAG - Chulhwee Joo

Doc2KG 2026 - Workshop - 2698 - SemGraphRAG: Hybrid RAG with Semantic Knowledge Graph Integration - An Lam, Brian Elvesæter, Roberto Avogadro, Aleena Thomas and Xiang Ma

Doc2KG 2026 - Workshop - 5813 - Conversational transcription and knowledge graph representation - Karima Boutalbi, Antoine Leveque, Olivier Le Van and Rafika Boutalbi

Doc2KG 2026 - Workshop - 2016 - From Literature Overload to Knowledge Graph: An Automated Pipeline for Literature Reviews - Olivier Le Van, Pierre Dardouillet and Karima Boutalbi

Doc2KG 2026 - Workshop - 2461 - LoRA-Driven CTI Triple Extraction and Knowledge Graph Construction - William Mitchell, Erdogan Dogdu and Roya Choupani

QUORS 2026 - Workshop - 8206 - Ecosystem-Level Inference Redundancy (ELIR): A Quality-Oriented Cross-Platform Reuse Framework for Sustainable AI Ecosystems - Meltem Yildirim Imamoglu

Student Research Symposium (SRS) - Session 2

Journal-then-Conference (JC) - Session 1

Location: Room 46

Session Chair: Stelvio Cimato, University of Milan

SRS - SRS - 2287 - Towards Circular Accumulation of Latent Local Knowledge via Automated Interview System: A Preliminary Study - Aoi Sassa, Haru Terashima, Naoki Tamura, Shoji Kazuyuki, Kenta Urano, Takuro Yonezawa, Tadashi Yoshikawa and Nobuo Kawaguchi

SRS - SRS - 5116 - Bridging Strange and Familiar: Design of Knowledge Expansion System via Daily Surroundings - Kohei Matsumoto, Hideki Deguchi, Yoshiki Watanabe, Kaiya Shimura, Nozomi Hayashida, Kenta Urano, Takuro Yonezawa and Nobuo Kawaguchi

SRS - SRS - 5335 - Virtual Memory Support for NoMMU Linux on High-performance Microcontroller Units - Yoshifumi Shu, Yutaka Matsubara and Hiroaki Takada

JC - Full - 1969 - Toward Scalable Multi-Level and Dynamic Representation Learning for Multiplex Graphs - Mohamed Bouguessa

JC - Full - 2995 - Extending HARD-Lite: Toward Scalable Hardware-Assisted Malware Detection - Chutitep Woralert and Chen Liu

JC - Full - 7176 - Toward Large-Scale and Interoperable Smart Home Emulator with CyReal Framework - Van Cu Pham, Shinsuke Miwa, Toshiyuki Miyachi and Yasuo Tan



WEDNESDAY JULY 8

9:00 AM – 10:30 AM

Symposium on IEEE Computer Society at 80 and IEEE COMPSAC at 50: Legacies of Computing Innovation

Location: Room 24

Session Chair: Vladimir Getov, University of Westminster

Panel Chair: Vladimir Getov, University of Westminster

Panelists: Jack Copeland, John L. Gustafson, and Brian Stuart

COMPSAC50 - Full - 8218 - The Early Electronic Digital Computers – Panel Summary - Vladimir Getov, Jack Copeland, John L. Gustafson and Brian Stuart

Symposium on Applied Artificial Intelligence (AAI)- Session 4

Location: Room 26

Session Chair: Luiz Capretz, Western University

AAI - Full - 9661 - Enhancing Legal Information Retrieval Through Metadata-Driven Multi-Hop RAG Architecture - Eniedson Fabiano Pereira da Silva Júnior, Claudio de Souza Baptista, André Luiz Firmino Alves, Luciano de Andrade Barbosa, Clécio Bruno Medeiros Araújo and Fábio Lucas Meira de Souza Barbosa

AAI - Full - 9167 - Distribution-Aware Diffusion: Enhancing Rotated Object Detection via Gaussian Wasserstein Distance Loss - Youcef Zermane, Yacine Amara and Mohamed Akrem Benatia

AAI - Full - 9310 - Training-Free Agentic AI: Probabilistic Control and Coordination in Multi-Agent LLM Systems - Mohammad Parsa Hosseini, Ankit Shah, Saiyra Qureshi, Alex Huang, Connie Miao and Wei Wei

AAI - Full - 1255 - Designing LLM Agents for Output Checking in Research Data Centers: Disclosure Risk and Output Validation - Afshin Ashofteh, Ricardo Carvalho and Pedro Campos

AAI - Full - 6290 - Hybrid JIT-CUDA Graph Optimization for Low-Latency Large Language Model Inference - Divakar Yadav and Tian Zhao

AAI - Short - 6764 - Enhancing AI Agent Evaluation through Critical Step Identification - Sambit Kumar Panda, Subodh Kumar Chaturvedi, Chakradhar Reddy Mandlem and Hemant Yadav

Symposium on Software Engineering Technologies & Applications (SETA) - Session 4

Location: Room 23

Session Chair: Simanta Mitra, Iowa State University

SETA - Full - 1346 - VADER: Validation-Driven DSL Generation with Small Language Models - Junaid Baber, Didier Schwab, Gabriela Gonzalez-Saez and Nicolas Hili

SETA - Full - 5219 - A Method of Incremental Detection for Concurrent Dataflow Anomalies during Software Development - Koko Harianto, Feng-Jian Wang, Stephen S. Yau and William Cheng-Chung Chu

SETA - Short - 8084 - Learning a Bayesian Surrogate Model for Measuring Test Coverage in Automated Driving Systems - Pierre-Samuel Gréau-Hamard, Arnaud Gotlieb, Faouzi Adjed and Mohamed Ibn Khedher

WEDNESDAY JULY 8

SETA - Short - 7471 - Architecture Recovery Revisited: A Hybrid Knowledge Graph and LLM-based Approach - Syed Quadri and Kostas Kontogiannis

Symposium on Security, Privacy & Trust in Computing (SEPT) - Session 2

Location: Room 22

Session Chair: Hossain Shahriar, University of West Florida

SEPT - Full - 9159 - Generating Diverse Network Control Policies for Cyber Attack Response Support via Service Dependency Graph Exploration - Shinnosuke Kataoka, Daisuke Kotani and Yasuo Okabe

SEPT - Short - 6345 - Adaptive Agentic Honeypots: Decoupling Simulation from Reasoning for Robust Cyber Deception - Nabil Moukafih, Aishvariya Priya Rathina Sabapathy, Andrés Murillo and Sekiya Motoyoshi

SEPT - Full - 8069 - Measuring and Evaluating the Performance of Generative AI Models for Scam Detection - Cem Topcuoglu, Seyed Ali Akhavani, Harel Israel Berger, Sadia Afroz, Michalis Pachilakis, Vibhor Sehgal, Leyla Bilge and Engin Kirda

SEPT - Short - 0107 - Detection and Visualization of Vulnerability Fixes Considering Dependencies in Open Source Software - Tomohiko Yano, Hiroki Kuzuno and Yoshiaki Shiraishi

SEPT - Short - 2172 - Global AI Regulations for FAIR and Ethics in High-Risk Use Cases: A Comparative Review - Aasish Sharma, Dimitar Koysev, Christopher Anich and Julian Kunkel

Fast Abstracts (FA) - Session 1

Location: Sala Torres Quevedo

Session Chair: Michiharu Takemoto, IPUT

Fast Abstracts(FA) - FA - 4096 - Transaction Based Blockchain Profiling for Dark Web Cryptocurrency Forensics - Mahdi Daghmehchi Firoozjaei, Minchang Kim, Hyungshick Kim and Qing Tan

Fast Abstracts(FA) - FA - 5434 - 6G-empowered Agentic Multi-Vehicle Digital Twin Coordination for Sustainable Autonomous Farm Operations - Simon Gimpel, Marcus Reutemann and Jannis Jung

Fast Abstracts(FA) - Workshop - 5048 - An Interpretable Rule-Based Framework with Language Model Support for Placement Prediction and Skill Enhancement - Anjan Dutta, Bhargav Prasad Das, Punyasha Chatterjee, Subhankar Dhar and Soumya Sen

Fast Abstracts(FA) - FA - 7481 - HuLePA-RoV: Human-Legible, Privacy-Aware Robotic Vision via Physical Sensor Control - Yang Fan Goh and Thanh Trung Mai

FA - FA - 4467 - Rethinking the Web Infrastructure for Agents - Yun Ma

Symposium on IT in Practice (ITiP) - Session 2

Symposium on Human Computing & Social Computing (HCSC) - Session 2

Location: Room 14

Session Chair: AKM Jahangir Majumder, University of South Carolina Upstate

ITiP - Short - 2848 - Demystifying Complexity: A Component-Based Approach to Democratizing Domain Workflows - Gabriel Oyeyemi, Mariam Ali, Cathal Hoare, Sharon Coffee, James O'Donnell and Tiziana Margaria

HCSC - Full - 1347 - Tiny Data, Big Policy? Generative AI Agents for Context-Sensitive Climate Governance - Aparup Khatua, Hamam Mokayed, Foteini Liwicki and Marcus Liwicki

CAP - Full - 8957 - SK-ART: Optimizing Adaptive Radix Trees for the Shift-Based Skyrmion Racetrack Memory - Zhen-Yang Guo, Tien-Hsin Hsieh, Chuan-Ming Liu, Chieh-Jen Wang and Shuo-Han Chen

Symposium on Smart & Connected Health (SCH) - Session 2

Symposium on BlockChain (BEST) - Session 3

Location: Sala Verde

Session Chair: Alfredo Cuzzocrea, University of Calabria

SCH - Full - 5672 - VR-MedTutor: A Multimodal Virtual Reality Platform with AI Agent-Assisted Brain Tumor Education - Alina Duca and Adrian Iftene

SCH - Short - 3971 - PolyF-EMG: Bridging Internal Load and External Motion for Fatigue-Aware Activity Recognition - Zhenyu Zhang, Chengxuan Zhou and Fuhong Wang

SCH - Short - 4092 - Immersive XR Systems for Smart and Connected Mental Health Care: An Exploratory Study on Awareness, Early Detection, and Adaptive Support - George-Gabriel Constantinescu and Adrian Iftene

BEST - Short - 7210 - Benchmarking LLM-Based Static Analysis for Secure Smart Contract Development: Reliability, Limitations, and Potential Hybrid Solutions - Stefan-Claudiu Susan, Andrei Arusoaie and Dorel Lucanu

BEST - Short - 9260 - OracleGuardian: Detecting Price Oracle Manipulation with Gradient-Guided Fuzzing - Yepeng Ding, Ahmed Twabi, Tohru Kondo, Junwei Yu and Hiroyuki Sato

BEST - Full - 5054 - GasZero: A Neuro-Symbolic Approach to Solidity Gas Optimization - Sourena Khanzadeh and Manar Alalfi

14th IEEE International Workshop on Architecture, Design, Deployment, and Management of Networks and Applications (ADMNET) - Session 1

Location: Room 46

Session Chair: Katsuya Matsubara, Future University Hakodate

ADMNET - Workshop - 1907 - Architectures, Learning Loops, and Emergence in Agentic Services Computing - Sadaf Shafi, Michael Bidollahkhani and Julian Kunkel

ADMNET - Workshop - 1172 - Stable Handoff Method Using Staged Decisions for Wireless LAN Systems - Yingfan Ning, Hideaki Goto and Takuo Suganuma

ADMNET - Workshop - 1247 - Experimental Evaluation of DetNet PREOF Mechanisms on Programmable Data Planes - Marta Blanco Caamaño

WEDNESDAY JULY 8

ADMNET - Workshop - 2401 - Vendor-Lock Free Security Policy Synchronization between Redundant Firewalls - Motoyuki Ohmori

ADMNET - Workshop - 2482 - Power-saving Application Placement Policies and Bayesian Optimization-based DVFS for Multi-tenant Data Centers - Katsumi Fujita, Hirofumi Noguchi and Masashi Kaneko

10:30 AM – 11:00 AM

Coffee Break

Location: First Floor Hall

11:00 AM – 12:30 PM

PCIC Report(11:00-11:30)

Hiroyuki Ohsaki, Kwansei Gakuin University

Javier Soriano, Universidad Politécnica de Madrid

Plenary Keynote: *Geopolitics of AI in a Multipolar Context*

Claudio Feijóo

Location: Auditorium (Salón de Actos)

12:30 PM – 1:30 PM

Lunch Break

1:30 PM – 3:00 PM

Symposium on IEEE Computer Society at 80 and IEEE COMPSAC at 50: Legacies of Computing Innovation

Location: Room 26

Keynote: *A Brief History of Computing with Real Numbers* - John L. Gustafson

Session Chair: Vladimir Getov, University of Westminster

4th IEEE International Workshop on Advanced Visual Knowledge Management Tools (AVKMT) - Session 1

18th IEEE International Workshop on Software Test Automation (STA) - Session 1

Location: Room 24

Session Chair: Tiziana Margaria, University of Limerick, Ireland

AVKMT 2026 - Workshop - 7856 - A Graphical Tool for Provenance Template Authoring: Visual Modeling and Automated PROV-N Generation - Marcos Alves Vieira, Sergio T. Carvalho and Thamer Nascimento

STA 2026 - Workshop - 2808 - Empirical Evaluation of the uSV Ratio Metric for Fault Localization - Willian Ferreira, Plinio Leitao-Junior, Thamer Nascimento, Deuslirio Silva-Junior and Rachel Harrison

AVKMT 2026 - Workshop - 7305 - An Interactive Tool for Data Service Identification in Cyber-Physical Production Networks - Devis Bianchini, Massimiliano Garda and Michele Melchiori

WEDNESDAY JULY 8

AVKMT 2026 - Workshop - 8556 - A Visual Application Domain level DSL for Blockchain - Simone Valentini and Tiziana Margaria

AVKMT 2026 - Workshop - 3160 - A Decision-Support Framework for LLM Allocation in Multi-Agent Service Composition Systems - Devis Bianchini, Massimiliano Garda and Michele Melchiori

AVKMT 2026 - Workshop - 8769 - Asset Census and Taxonomies for Establishing a Community of Practice - Bekan Mekonen, Cathal Hoare, Thamizhiniyan Natarajan and Tiziana Margaria

STA 2026 - Workshop - 5753 - Toward Reliable LLM Code Generation: Adaptive Routing Framework for Ambiguous Requirements - Muhammad Ahmed, Edwar Tiu, Niyati Nikunj Kapadia, Darren Gabrido and Muhammad Abdul Basit Ur Rahim

14th IEEE International Workshop on Modeling and Verifying Distributed-Embedded Applications (MVDA) - Session 1

12th IEEE International Workshop on Medical Computing (MediComp) - Session 1

Location: Room 23

Session Chair: Ahlem Ben Younes ENSIT, University of Tunis, LATICE Research Laboratory, Tunisia

MVDA 2026 - Workshop - 7233 - Runtime Verification of Interleaved Concurrent Systems with Shared-Variable Communication - Nayef Alshammari

MVDA 2026 - Workshop - 9983 - Ontology-Free Biomedical Knowledge Graph Induction (OF-Bio-KG) - Ahlem Ben Youness, Baha Eddine Kalai, Laila Ben Ayed and Chaima Kachroud

MediComp 2026 - Workshop - 6543 - Analysis and Evaluation of Complexity in Clinical Processes: A Conformance Checking-Based Approach - Lerina Aversano, Gianfranco Semeraro and Chiara Verdone

MediComp 2026 - Workshop - 8324 - Protein Language Models and Graph-Based Reranking for Toxin-Binder Screening in Antivenom Discovery - Nina Anoop, Anoop Viswan Koothattu and Vani Kandasamy

6th IEEE International Workshop on Dynamic Data Science and Big Data Analytics in Finance (DDS-BDAF) - Session 1

9th IEEE International Workshop on Secure Digital Identity Management (SDIM) - Session 1

Location: Room 22

Session Chair: AKM Jahangir Majumder, University of South Carolina Upstate

DDS-BDAF 2026 - Workshop - 4666 - ML-Based Wash Trading Detection on CEXs Using Random Forest and CNN Autoencoder - Yitbarek Yimame, Damiano Di Francesco Maesa, Laura Ricci and Rogerio de Aquino Silva

DDS-BDAF 2026 - Workshop - 0453 - High-Frequency Early Warning of Systemic Financial Stress in Europe Using Financial and Non-Financial Data with Machine Learning - Dmytro Diachkov and Afshin Ashofteh

SDIM 2026 - Workshop - 2854 - Database-Native Authorization for Human and Autonomous Principals: The SHRBAC Model - Ross Slaney

WEDNESDAY JULY 8

SDIM 2026 - Workshop - 9298 - Auditable Certificate Issuance with Zero-Knowledge Proof of Claim Validation - Ryosuke Abe, Rintaro Inagaki and Shigeya Suzuki

SDIM 2026 - Workshop - 3104 - A VC-Aligned Backend Protocol for Inter-Institutional Credit Transfer - Kazuhiro Toda, Masumi Hori and Toyokazu Akiyama

Fast Abstracts (FA) - Session 2

Location: Sala Torres Quevedo

Session Chair: Michiharu Takemoto, IPUT

Fast Abstracts(FA) - FA - 2390 - Optimizing YOLO and ByteTrack for Robust Highway Traffic Monitoring in Diverse Weather Conditions - Matthew Biswas, Ali Keivanmarz and Hamid Sharifzadeh

Fast Abstracts(FA) - FA - 0635 - Agentic RAG Pipeline for Tooling - Leonardo Rocha and Rian Pessoa

Fast Abstracts(FA) - FA - 3948 - Social Incentive Mechanism Based on Data Freshness and Reverse Auction Models for Mobile Crowdsensing - Chih-Lin Hu, Sheng-Min Yuan, Wu-Min Sung, Kun-Yu Lin and Carl K. Chang

Fast Abstracts(FA) - FA - 1190 - Automating End-to-End Test Suite Design for Microservices with Large Language Models - Elena Ovsiannikova and Dragos Truscan

Fast Abstracts(FA) - FA - 2980 - Towards a Model-driven Framework for Agentic AI - Antonio Rey Atienza and Juan de Lara

Fast Abstracts(FA) - FA - 3529 - Evaluating Runtime Security in DevSecOps Pipelines with SELinux Mandatory Access Control - Harsh Dhruv

10th IEEE International Workshop on Open Education Resources (OER) - Session 1

Location: Room 14

Session Chair: Henry Chan, The Hong Kong Polytechnic University

OER 2026 - Workshop - 1749 - A Framework for Immersive Learning via Panoramic Video Conversion - Zhuohan Fu, Ping Him Lam and Henry Chan

OER 2026 - Workshop - 2036 - Learning SQL from Large Language Model Reasoning: a Laboratory Experience - Luca Cagliero, Laura Farinetti and Rossella D'Onghia

OER 2026 - Workshop - 5701 - Experience Transfer Through OER in Virtual Production: On-Set Alignment Support for VP Workflows - Qingyang Liu, Liangli Wang, Dave Towey, Youyang Wu, Houpu Song, Haoyi Jiang, Nazia Anwar, Levi Dean, Filippo Gilardi and Zhaoxin Zhi

OER 2026 - Workshop - 2003 - From Hand-Drawn Structural Formulas to 3D Molecular Visualization: A Mobile System for Chemistry Education - Thamer Nascimento, Eduardo Amorim, Ana Karoline Valdo, Deborah Fernandes, Juliana Felix and Fabrizio Soares

OER 2026 - Workshop - 7196 - A Low-Cost Interactive System for Molecular Visualization Based on Smartwatch Interaction and Google Cardboard - Jamilly Santos, Marcos Alves Vieira, Juliana

WEDNESDAY JULY 8

Felix, Fabrizzio Soares and Thamer Nascimento

OER 2026 - Workshop - 1369 - RealMeCV Writer: A RAG-Enhanced Agentic Framework for Personalized and Reflective CV Generation - Gang Wu, Lei Song, Elizabeth Morris, Hamid Sharifzadeh and Farnaz Mehr

10th IEEE International Workshop on Software Engineering for Smart Systems (SESS) - Session 1

1st IEEE International Workshop on Responsible AI for Smart Cities (RAISCity) - Session 1

Location: Sala Verde

Session Chair: Francois Siewe, De Montfort University

SESS 2026 - Workshop - 6883 - AI-Driven Mapping of Email Communications to Underlying Enterprise Processes - Helia Ostadalipour, Kostas Kontogiannis, Dimitris Lyras and Nikos Rassias

SESS 2026 - Workshop - 8009 - From Factory Floor to Digital Product Passport: A Dual-Chain NFT Architecture for Automotive Traceability - Silvio Meneguzzo, Alfredo Favenza and Alessandro Mozzato

SESS 2026 - Workshop - 8399 - Towards a Formal Verification of IoT System Models Designed in the Cisco Packet Tracer Tool - Francois Siewe

RAISCity 2026 - Workshop - 9557 - Building More Dependable AI-based Perception Systems through Deterministic and Robust Middleware Design: A Work-in-Progress - Jokin Arozamena, Santiago Royo, Jorge Parra, Joanes Plazaola, Claudia Martínez and Maider Zamalloa

STPSA 2026 - Workshop - 1376 - Ontological Knowledge Blocks: Executable Compliance and Profile-Based Validation for Trustworthy AI Systems - Aasish Kumar Sharma and Julian Martin Kunkel

Mentorium

Location: Room 46

Session Chair: Teodoro MONTANARO, University of Salento

3:00 PM – 3:30 PM

Coffee Break

Location: First Floor Hall

3:30 PM – 5:00 PM

Plenary Panel: AI Driven Applications Shaping the Future

Location: Auditorium (Salón de Actos)

Session Chair: Sorel Reisman, California State University

8:00 PM – 10:00 PM

Banquet

Location: La Masía de José Luis

bus departs conference venue at 7:00 pm

THURSDAY JULY 9

9:00 AM – 10:30 AM

Symposium on Applied Artificial Intelligence (AAI)- Session 5

Location: Room 26

Session Chair: Luiz Capretz, Western University, Canada

AAI - Full - 9127 - Summarization-Aware Inference Pipelines for Cost-Efficient Suicide Risk Classification Using Large Language Models - Aditya Tekale and Mohammad Masum

AAI - Full - 5905 - Enhancing Explainability in Public Procurement Audits via Neuro-Symbolic Learning with R-GCN and Semantic Loss - Marcos Leno Ferreira Pompeu and Raimir Holanda Filho

AAI - Short - 2850 - From Wings to Wisdom: Bio-Inspired Swarm Coordination in Multi-Agent Learning Across the Cloud Continuum - Kakia Panagidi, Charalampos Andreou, Kostandinos Myrtollari and Stathes Hadjiefthymiades

AAI - Short - 5191 - Evaluation of Parkinson's Motor Symptoms in Clinical and Free-Living Conditions - Carlos Polvorinos-Fernández, Irene Sánchez-Hernández, Luigi Borzi, Gabriella Olmo, Guillermo de Arcas and Ignacio Pavón

AAI - Short - 6476 - Grounded Physics Representations Enable Robust Causal Reasoning in Language Models - Jesse Pokora and Tian Zhao

AAI - Full - 6354 - Multi-Agent LLM-based Metamorphic Testing for REST APIs - Shehroz Khan, Abdullah Mughees, Gaadha Sudheerbabu, Tanwir Ahmad and Dragos Truscan

Symposium on Smart IoT Systems & Applications (SIOT) - Session 1

Location: Room 24

Session Chair: AKM Jahangir Majumder, University of South Carolina Upstate

SIOT - Full - 8722 - Wi-Fi CSI-Based Anomaly Detection for Multi-Person Occupancy in Private Rooms - Shota Fukui and Naoyuki Morimoto

SIOT - Full - 7006 - LTL in the Wild: A Decade of Specifying Edge/IoT System Behaviors - Angeliki Pantiora, Roman Bögli, Timo Kehrer and Christos Tsigkanos

SIOT - Full - 8353 - Adaptive and Scalable Cryptography for IoT-Enabled Medical Cyber-Physical Systems: Benchmarking Symmetric and Asymmetric Approaches - Akm Jahangir Majumder, Alexa Julienne Mohammad and Ngocchau Nguyen

SIOT - Full - 3644 - Enabling Large Language Model based Data Synthesis in Wireless Mesh Network Configuration for Internet of Things - Aitian Ma, Jean Cruz, Dongsheng Luo and Mo Sha

SIOT - Short - 6455 - VKB-Hunter: Vulnerability Knowledge Base Based Black-box Protocol Fuzzer for IoT Devices - Zhijin Chen, Jiemin Wan, Le Yu and Guozi Sun

Symposium on Security, Privacy, & Trust in Computing (SEPT) - Session 3

Location: Room 23

Session Chair: Dianxiang Xu, University of Missouri - Kansas City

SEPT - Full - 8386 - Auditing Unexpected Leakage in Label Differential Privacy - Hinata Sekiguchi, Shun Takagi, Satoshi Hasegawa and Masato Oguchi

SEPT - Full - 3382 - Security Evaluation of Multi-Slot Slider CAPTCHAs Against Deep Learning-Based Attacks - Ye Hanghui and Yasuo Okabe

SEPT - Full - 6616 - PentestLLM: A Cyber Kill Chain-driven Multi-Agent Large Language Model Framework Enabling Automatic Penetration Testing - Fei Du, Hiroyuki Sato, Yang Hong, Lekun Liu, Zhenzhen Jiang, Yan Bai and Wenjun Fan

SEPT - Full - 2373 - Oblivious FM-Index: Secure Full-Text Indexing - Fiza Ashraf and Oguzhan Kulekci

SEPT - Short - 6299 - Forensic Identification of Forearm Veins using Improved Biometric Graph Matching - Lin Liu, Hamid Sharifzadeh and Ali Keivanmarz

SEPT - Full - 7981 - LLM-Based Data Generation and Augmentation for Rust Vulnerability Detection - Irfan Khan, Yu Luo, Frank Xu and Dianxiang Xu

Symposium on Autonomous Systems (ASYS) - Session 1

Location: Room 22

Session Chair: Mihhail Matskin, Royal Institute of Technology - KTH, Sweden

ASYS - Full - 6932 - Language-Grounded Strategy-Following Multi-Agent Deep Reinforcement Learning for Controllability of Real-World Applications - Yoshinari Motokawa and Toshiharu Sugawara

ASYS - Full - 2058 - Feasibility-Aware Boundary-Pushing Adversarial Policy for Critical Background Vehicles in Safety-Critical Scenario Generation - Wenjun Wang, Dongcheng Li and Man Zhao

ASYS - Full - 4146 - KC-Agent: A Dual-Process Cognitive Architecture for Efficient ML Model Improvement - Gusseppe Bravo-Rocca, Jordi Guitart, Ajay Dholakia, David Ellison and Puneet Jain

ASYS - Full - 2811 - Cognitive Banking: An Adaptive and Decentralized Decision-Making Model Based on Digital Assets for Multi-Agent Systems - Jose Edilson Silva Filho, Cesar Augusto Missio Marcon, Laurent Vercouter, Jarbas Aryel Nunes da Silveira and Walter A. dos Santos

ASYS - Short - 6507 - Action classification methods for Autonomous Robotic Application based on Multimodal Data Process - Razane Azrou, Vaiyee Huynh and Nathan Damette

ASYS - Short - 5348 - Runtime Adaptive Energy-aware Selection of Configurations for Resource Constrained Devices - Paulo J.S. Ferreira, João Mendes-Moreira and João M.P. Cardoso

Symposium on IEEE Computer Society at 80 and IEEE COMPSAC at 50: Legacies of Computing Innovation - Session 2

Location: Sala Torres Quevedo

Session Chair: Sahra Sedigh Sarvestani, Missouri University of Science & Technology

THURSDAY JULY 9

COMPSAC50 - Full - 6565 - Absorbing·Adapting·Adding: A Brief Retrospective on Seventy-Year Computing in China - Hong Mei, Yungang Bao and Hongwei Si

COMPSAC50 - Full - 1389 - Co-Evolution of Computing, IEEE CS, and COMPSAC: Reflections and Shaping the Future - San Murugesan

COMPSAC50 - Full - 3888 - Vision for the Future of Insider Threat: Artificial Intelligence Risks and Challenges - William R. Claycomb and Daniel L Costa

COMPSAC50 - Full - 4624 - History and Future of the SWEBOK Guide: Guide to the Software Engineering Body of Knowledge - Hironori Washizaki, Maria-Isabel Sanchez-Segura, Juan Garbajosa, Steve Tockey and Joaquim Jorge

COMPSAC50 - Full - 1153 - IEEE Computer Society in the Age of AI: A Strategic Position Paper for the Next Decade - Jean-Luc Gaudiot and Shaoshan Liu

Symposium on Emerging Advances in Technologies & Applications (EATA) - Session 1

Location: Room 14

Session Chair: Sanfan Liu, Missouri University of Science & Technology

EATA - Full - 1234 - Adversarial Generation of Multi-Turn Debates for Hate Speech Mitigation via Retrieval-Augmented Generation - Erfan Bayat, Aurora Gensale and Luca Cagliero

EATA - Full - 0994 - DATT: Dimension-Augmented Tensor-Train Decomposition for Neural Network Compression - Yu-Chuan Tai, Cheng-Yu Xie and Che-Rung Lee

EATA - Short - 1945 - An Architecture of Media Analysis Platform for Analyzing Posts on Social Networking Services from Multiple Perspectives - Ryosuke Abe, Ryuichi Matsukura, Shigeya Suzuki and Osamu Nakamura

EATA - Short - 3587 - Mitigating The Effect of Class Imbalance in Data with Hierarchical and Dependable Structure - Bipin Chhetri, Deepika Giri, Avishek Kadel, Rabin Kumar Karki and Akbar Siami Namin

EATA - Full - 6607 - Multimodal Emotion Recognition for Empathic Dialogue Using Global and Local Features of Speech and Text - Miran Kondo and Naoyuki Morimoto

SCH - Short - 4444 - Cost-Aware and Reproducible Diffusion-Based Synthetic Data Integration for Imbalanced Classification - Md Minul Alam and Shahram Latifi

9th International Workshop on Advances in Artificial Intelligence and Machine Learning (AIML) - Session 1

Location: Sala Verde

Session Chair: Simanta Mitra, Iowa State University

AIML 2026 - Workshop - 2595 - Automating Infant General Movements Assessment via Multi-Dataset Spatio-Temporal Graph Convolutional Networks - Guilherme Schöler and Márcio Pinho

AIML 2026 - Workshop - 0014 - When AI Joins the Team: Understanding Human-Agent Collaboration in Pull Requests - Miguel Romero-Arjona, Saman Barakat, Alberto Martin-Lopez,

Ana B. Sánchez, Gabriele Bavota and Sergio Segura

AIML 2026 - Workshop - 6248 - Critical Role of APIs in Enterprise Modernization: An AI-Augmented Architecture for Intelligent API Lifecycle Management - Venkata Pavan Kumar Gummadi

AIML 2026 - Workshop - 8384 - Towards Proactive Air Traffic Safety with Speech LLMs: Transcription, Attribute Tagging, and Readback Detection - Raymond Chung

AIML 2026 - Workshop - 8059 - Online Federated Learning on Resource-Limited IoT Devices for Traffic Flow Prediction in Smart Mobility Ecosystems - Marco Pizzolante, Angela-Tafadzwa Shumba, Teodoro Montanaro, Gianluigi Semeraro, Davide Cantoro, Davide Rollo, Mattia Cotardo, Ilaria Sergi, Paolo Visconti and Luigi Patrono

AIML 2026 - Workshop - 0061 - A Conceptual Model of Operationalizable Trustworthiness for Autonomous Systems - Balint Mate, Diego Perez-Palacin, Vincenzo Scotti and Raffaella Mirandola

2nd IEEE International Workshop on Blockchain and Distributed Ledger Technologies (BlockDLT) - Session 1

Location: Room 46

Session Chair: Silvio Meneguzzo, University of Turin

BlockDLT - Workshop - 0944 - Selective Cross-DAO Execution Coupling for Modular On-Chain Governance - Santosh Maurya and Tatsuya Sato

BlockDLT - Workshop - 1892 - A Blockchain-Based Architecture for Auditable and Privacy-Preserving Maintenance Ticketing in Hospital Environments - Noemi Romani, Valentina Gatteschi, Valentina Villa, Marco Domaneschi and Riccardo de Caria

BlockDLT - Workshop - 3591 - Post-Quantum Signature Migration for Ethereum Blockchain: A Verification Metrics Study - Muhammad Taha Ramzan and Stelvio Cimato

BlockDLT - Workshop - 3988 - Single Verifier vs. Decentralized Oracle Networks for Verifiable Credential Verification: An Empirical Comparison - Julian Theißen, Selin Sezer and Wolfgang Prinz

BlockDLT - Workshop - 4329 - Decentralized Intent-Based Multi-Robot Task Planner with LLM Oracles on Hyperledger Fabric - Farhad Keramat, Salma Salimi and Tomi Westerlund

BlockDLT - Workshop - 6723 - A forgery attack on the Block.co blockchain-based digital credential certification system - Giacomo Zonneveld, Giulia Rafaiani and Marco Baldi

10:30 AM – 11:00 AM

Coffee Break

Location: First Floor Hall

THURSDAY JULY 9

11:00 AM – 12:30 PM

COMPSAC 2027 Planning Presentation

Yasuo Okabe, Kyoto University

Plenary Keynote: *From Testbeds to Valleys of the Wind: Cultivating the Next Generation of Cyber Infrastructure in the Age of Agentic AI*

Shinji Shimojo

Location: Room 26

Session Chair: Yasuo Okabe, Kyoto University

12:30 PM – 1:30 PM

Lunch Break & General Meeting for COMPSAC 2027 Planning

1:30 PM – 3:00 PM

Symposium on Applied Artificial Intelligence (AAI)- Session 6

Location: Room 26

Session Chair: San Murugesan, BRITE Professional Services

AAI - Short - 9794 - Exploring the Performance of Lightweight LLMs for Portfolio Optimization - Deddy Jobson and Yuichi Takano

AAI - Short - 9145 - From Reactive to Proactive: An Explainable Risk Awareness Framework for Logistics Cyber-Physical Systems - Ke Huang, Yan Liu, Bin Guo, Yasan Ding, Jing Zhang and Zhiwen Yu

AAI - Short - 0598 - From Stochastic Generation to Deterministic Logic: A Cross-Domain Survey of Prompt Engineering Across NLP, Vision, and Software Engineering - Tianyang Wu and Dongcheng Li

AAI - Short - 9397 - Semi-Supervised Text Classification for Public Expenditure Analysis - Pedro Henrique Teixeira, Nádia Silva and Rogerio Salvini

AAI - Short - 1321 - SCOPE: A Proof-of-Concept Framework for Measuring Alignment in Data-Scarce Cybergrooming Domains - Jeong-Eun Choi, Shiying Fan and Martin Steinebach

SETA - Full - 3369 - TraceStructRepair: Effective Diagnostic Representation for Context-Limited Automated Program Repair - Pan Lu and Dongcheng Li

SETA - Short - 0684 - Balancing Accuracy and Cost: An Adaptive Hybrid Framework for Feature Selection in Software Defect Prediction - Dongcheng Li

Symposium on Software Engineering Technologies & Applications (SETA) - Session 5

Location: Room 24

Session Chair: Yasmeen Rawajfih, Tuskegee University

SETA - Full - 9701 - A North Star Metric-Driven Software Process Improvement Framework - Ross Arnold and Yasmeen Rawajfih

SETA - Short - 3272 - Empirical Evaluation of CPython and Mojo for Performance and Code Comprehensibility - Euan Mclean Campbell, Kehinde Babaagba and Oluwaseun Bamgboye

SETA - Short - 7863 - A Multi-Language Parser Pipeline for Software Analysis and Verification - Mete Isiksalan, Kostas Kontogiannis, Michael Rennie and Christophe Elek

SETA - Short - 6570 - Reliability-Aware Multi-Agent Sonification for Visually Impaired Indoor Navigation - Matei Madalin and Lenuța Alboiaie

SETA - Short - 5442 - Why Agentic Refactoring Pull Requests Get Rejected? - Aymen Masmoudi, Belhassen Khfacha, Andrew Haralambous, Eman Abdullah Alomar and Mohamed Wiem Mkaouer

SETA - Short - 4805 - Does Semantic Heterogeneity Matter? Investigating Multi-Modal Feature Fusion for HPC Performance Modeling - Alex Schneider and Apan Qasem

SETA - Short - 0285 - Agentic Partial Evaluation on Pandas Programs - Xavier Adettu and Tian Zhao

SETA - Short - 9808 - How Do Developers Adopt Micro-Frontends? A Survey on Drivers and Challenges - Antony Lemos and Everton Cavalcante

Symposium on Emerging Advances in Technologies & Applications (EATA) - Session 2

Symposium on Autonomous Systems (ASYS) - Session 2

Symposium on Smart IoT Systems & Applications (SIOT) - Session 2

Location: Room 23

Session Chair: Sahra Sedigh Sarvestani, Missouri University of Science & Technology

EATA - Full - 4898 - An FPGA-Based Low-Latency Glass-to-Glass Video Transmission Architecture for Human-in-the-Loop Control - Fumiaki Mizuno, Daiya Kato, Hideki Sunahara and Masaaki Sato

EATA - Short - 0197 - Fast and Accurate Classification with Parallel IDK Classifier Cascades - Ishrak Jahan Ratul and Kecheng Yang

EATA - Short - 6014 - A High-Resolution Temperature Estimation Method Integrating Fixed Sensors and Physical Simulation - Shinji Takada, Wataru Kunimi, Yuki Ito, Toru Abe and Takuo Suganuma

ASYS - Full - 3171 - Graph Orientation for Efficient Multi-agent Pickup and Delivery using Genetic Algorithm - Yuki Miyashita, Yosuke Fujisawa and Toshiharu Sugawara

SIOT - Full - 6605 - Real-Time Predictive Crowd Twin Platform by Efficient Data Assimilation - Atsuhiko Yano, Tatsuya Amano and Hirozumi Yamaguchi

4th IEEE International Workshop on Digital and Public Health (DIGI-HEALTH) - Session 1

Location: Room 22

Session Chair: Amina Mohammed Abdulla Almarzooqi, University of Sharjah

DIGI-HEALTH - Workshop - 4848 - Orthodontic Extraction Decision Support Using Deep Learning on Lateral Cephalometric Radiographs - João Pedro de Moura Medeiros, Adriel Araújo, Vinicius Teixeira, Piedro Rockembach Nunes, Fernando Jung Lau, Sunna Ahmad, Quinn Roederer, Vinicius Dutra, Dalvan Grielber, Hakan Turkkahraman and Márcio Pinho

DIGI-HEALTH 2026 - Workshop - 1728 - The Relationship Between Inhibiting and Supporting Factors in IT-Based POCT Critical Value Reporting by ICU Nurses - Mochamad Robby Fajar Cahya, Janisha Kavumpurath, Ni Ketut Ayu Sri Wiyandani, Nuniek Setyo Wardhani, Indra Gilang Pamungkas, Heba Khalil, Jacqueline Maria Dias, Nabeel Al-Yateem, Syed Azizur Rahman, Sawsan Abuhammad, Vidya Seshan, Fatma Refaat Ahmed and Muhammad Arsyad Subu

DIGI-HEALTH - Workshop - 4918 - Clustering Analysis of Medical Student Health and Stress Profiles Using K-Means - Amina Almarzouqi, Nabeel Al-Yateem, Syed Azizur Rahman and Said Salloum

DIGI-HEALTH - Workshop - 5846 - Engaging Patients and Providers: The Human Imperative for Telehealth Success in Chronic Care - Ahmad Rajeh Saifan, Zainab Fatehi Albikawi, Mohammad Abuadas, Razi Ali Abuanzeh, Alwathiq S.M Sonjoq, Nader Mahmoud Bani-Younis, Heba Ahmad Al-Hyari and Fatma Refaat Ahmed

DIGI-HEALTH - Workshop - 6659 - Application of Machine Learning Techniques on Prostate Cancer Genomics Data for Clustering and Classification - Amina Almarzouqi, Nabeel Al-Yateem, Syed Azizur Rahman and Said Salloum

DIGI-HEALTH - Workshop - 6714 - Exploring Mobile Data for Fatigue and Sleep Prediction in Neurodegenerative Diseases - Julian Fierrez, Alejandro Peña, Aythami Morales, Ruben Tolosana, Ruben Vera-Rodriguez, Meenakshi Chatterjee, Ahmaniemi Teemu, Wan-Fai Ng, Walter Maetzler, Nikolay V. Manyakov, Jennifer Kudelka, Ralf Reilmann, Janneke van der Woude, Kristen Davies, Victoria Macrae and Idea-Fast Consortium

Symposium on IEEE Computer Society at 80 and IEEE COMPSAC at 50: Legacies of Computing Innovation - Session 3

Location: Sala Torres Quevedo

Session Chair: Cristina Seceleanu, Mälardalen University

COMPSAC50 - The Early Years of the Computer Society: First Activities, Organization, and Results - Vladimir Getov

COMPSAC50 - From One Victory Party to Another Victory Party: Reflections on Decades of Engagement with IEEE COMPSAC and the Evolution of Computing - William Chu and Hongji Yang

COMPSAC50 - History of NSF in Computer Science & Engineering - Sam Xin

COMPSAC50 - History and Future Trends of Modern Computing and Software Engineering - Recounting 80 years of the IEEE Computer Society and 50 years of IEEE COMPSAC - Carl K. Chang

COMPSAC50 - From SAINT to COMPSAC: A Quarter Century of Partnership between IEEE-CS and IPSJ - Yasuo Okabe

21st IEEE International Workshop on e-Health Systems & Web Technologies (ESAS) - Session 1

9th International Workshop on Smart Computing and Applications (SCA) - Session 2

Location: Room 14

Session Chair: Atilla Elci, Hasan Kalyoncu University

ESAS 2026 - Workshop - 6381 - PharyTriFuse: Knowledge- and LLM-Augmented Deep Learning for Bacterial Pharyngitis Detection from Smartphone Throat Images - Ömer Atılım Koca, Murat

THURSDAY JULY 9

Uçar and Okan Bursa

ESAS 2026 - Workshop - 5438 - Evaluating the Performance of Large Language Models in Aspect-Based Sentiment Analysis: Cyprus Hotel Reviews - Ayçin Giritli, Salahi Erensel and Prof. Dr. Ali Öztüren

ESAS - Workshop - 3371 - Adapted KoGNER: Knowledge Graph Distillation with Multi-Task Learning for Biomedical Named Entity Recognition - Ayşe Nur Durmaz and Okan Bursa

SCA - Workshop - 2298 - Supporting Context-aware AI-augmented Data Extraction Features for Industrial Technical Documents - Ngoc Nhu Trang Nguyen and Hong-Linh Truong

SCA - Workshop - 8159 - Towards Quality Assurance for Human-Machine-Thing Integrated Intelligent Software: A Software Cybernetics Perspective - Yulei Chen, Yuge Nie, Huayao Wu, Changhai Nie and William Cheng-Chung Chu

3rd IEEE International Workshop on eHealth Systems and IoT Technologies (eHealth-IoT) - Session 1

Location: Sala Verde

Session Chair: Teodoro Montanaro, University of Salento

eHealth-IoT 2026 - Workshop - 1289 - Rule-based Arrhythmia Screening from Single-Lead ECG for Continuous Monitoring - Maria Sumerano, Sara Groppo and Massimo Violante

eHealth-IoT 2026 - Workshop - 5593 - Comparing Connectionless and Connection-Based BLE for Low-Rate Medical Telemetry - Parham Kasiri and Giorgio Mario Grasso

eHealth-IoT 2026 - Workshop - 5426 - Edible: An Integrated Smart-Fridge and Food-Management Ecosystem - Djefafla Hachem, Hossem Eddine Hafidi, Telli Hatem, Teodoro Montanaro and Luigi Patrono

eHealth-IoT 2026 - Workshop - 1968 - A Deterministic PPG-based Algorithm for Obstructive Sleep Apnea Detection - Michele Guagnano, Sara Groppo, Andrea Romigi and Massimo Violante

eHealth-IoT - Workshop - 2082 - Exploring Lower-Limb PPG Signals for Biometric Identification - Rafael Santos, Ana Patrícia Rocha, Ana Luísa M. Silva, Regina G. Oliveira, Pedro M. M. Correia, Cátia Leitão, Florinda Costa and António Teixeira

Standing Committee Meeting

Location: Room 46

3:00 PM – 3:30 PM

Coffee Break

Location: First Floor Hall

3:30 PM – 5:00 PM

Plenary Panel: *Modern Computing in 80 Years – Where We Came From and Where We Are Going*

Location: Auditorium (Salón de Actos)

Session Chair: Mohammad Zulkernine, Queen's University

FRIDAY JULY 10

9:00 AM – 10:30 AM

The 1st International Workshop on AI and Forensics and Cybersecurity (AIFC) - Session 1

Location: Room 26

Session Chair: Simanta Mitra, Iowa State University

AIFC - Workshop - 2376 - PRISM: A Lightweight Method for Jailbreak Detection via Prompt-Response Semantic Coherence Scoring in LLMs - Costabile Di Gregorio, Lama Sleem, Jerome Francois and Radu State

AIFC - Workshop - 0102 - SAGE-CH: Read-only Cyber Hygiene Assessment with Knowledge Graphs and AI-Assisted Remediation - Vitaly Andrejeus, Erdogan Dogdu and Roya Choupani

AIFC - Workshop - 2702 - Limitations of Large Language Models for Cybersecurity Risk Assessment - Monica Yulierth Chingate Mayorga, Gabriele Gatti and Cataldo Basile

AIFC - Workshop - 3536 - Beyond Binary: Multi-Class Classification of Audio Deepfakes by TTS and Vocoder Types - Karla Schäfer and Timo Straßburger

AIFC - Workshop - 7684 - A Real-Time Machine Learning Based Credit Card Fraud Detection System - Pragna Laboni and Pushkar Ogale

AIFC - Workshop - 8958 - Towards Secure & Robust Federated Learning - Islam Debicha

Symposium on Computing Education & Learning Technologies (CELT) - Session 1

Location: Room 24

Session Chair: Tiziana Margaria, University of Limerick

CELT - Full - 5445 - Designing Psychologically Safe AI Tutors for Students: An Emotion-Aware Post-hoc Intervention for LLM-Assisted Learning - Yicheng Sun, Jacky Keung, Hi Kuen Yu, Yihan Liao, Zhenyu Mao, Yishu Li and Xiaoxue Ma

CELT - Full - 6527 - Supporting Mathematics Teaching Practices in Security and Defense Education through Generative Artificial Intelligence and Digital Technologies - Marina Marchisio Conte, Giulia Boetti, Fabio Roman, Enrico Spinello, Nikolaos Karadimas, Linko Nikolov, Jaroslaw Zelkowski and Andrada Livia Cirneanu

CELT - Full - 1383 - Project-Based Teaching in Software Architecture Education - Salim Saay, Sven Jörges and Tiziana Margaria

CELT - Full - 3482 - Low-Cost AR and Tangible Interfaces for Early Childhood Education: A Case Study in Brazil - João Primo, Camila Horbylon, Luciana Cardoso, Kaique Cruvinel Carvalho, Onofre Junior, Juliana Felix, Fabrizio Soares and Thamer Nascimento

CELT - Full - 1303 - A Deck-Based Gamified Environment for Programming Education: Design and Evaluation - Vitor Ferreira, Marcos Vieira, Deborah Fernandes, Juliana Felix, Fabrizio Soares and Thamer Nascimento

CELT - Short - 7489 - An Adaptive and Proactive Recommendation System Based on Fuzzy Decision Tree for Mobile Support of Learners with Dysgraphia - Asma Mekki and Ines Bayoudh Saâdi

Industry Symposium - Session 1

Symposium on Applied Artificial Intelligence (AAI) - Session 7

Location: Room 23

Session Chair: San Murugesan, BRITE Professional Services

Industry - Full - 5066 - Personalizing LLMs for Financial Regulation using RAG and Knowledge Graphs: A Case Study at Regnology - Amal Ben Abdelhafidh, Montassar Ben Messaoud, Mohamed Tounsi and Mohamed Wiem Mkaouer

Industry - Full - 8358 - The Era of 1.58-bit LLMs: Enabling Low-Carbon Footprint AI for the Industrial Edge - Leonardo Rocha and João Brasil

Industry - Full - 7147 - BoostSAGE: A Weighted Ensemble Framework for Explainable Financial Fraud Detection - Chaw Thet Zan, Yusuke Maruyama and Felix Beierle

AAI - Short - 8060 - OmniPath: A Multi-Modal Agentic Framework for Auditing Wheelchair Accessibility - Asm Mobarak Hossain, Md Nadim Mahmud, Md Osman Gani and Vaskar Raychoudhury

AAI - Short - 1594 - Fine-Tuned Transformers vs. Zero-Shot Large Language Models for Mental Health Detection on Social Media - Mahmoud Abusager and Jamil Saquer

Industry - Full - 1978 - Where Do Expectations Diverge? An Empirical Analysis of Software Engineering Graduate Preparedness in Industry - Yicheng Sun, Jacky Keung, Hi Kuen Yu, Yihan Liao, Yishu Li and Xiaoxue Ma

14th IEEE International Workshop on Consumer Devices, Systems and Services (CDS) - Session 1

Location: Room 14

Session Chair: Yasuo Okabe, Kyoto University, Kobayashi Nobuhiro, University of Nagasaki

CDS 2026 - Workshop - 9433 - Planning Agent Assisted Static Workflow Generation for Mortgage Underwriting Automation - Srirama Nakshathri, Navaneeth Amarnath, Mamatha N, Pratyusha Rasamsetty and Deepak Kumar

CDS 2026 - Workshop - 9981 - A Prototype Implementation of SINETStream for Resource-Constrained MicroPython Environments - Takeshi Sakurada, Atsuko Takefusa, Kumiko Kobayashi, Ikki Fujiwara, Naoya Kitagawa and Kento Aida

CDS 2026 - Workshop - 7961 - Cloud-Assisted Zero Trust Architecture for CPS Actuators Using a Trust-Lease Extension of ZeTtiots-FW - Nobuhiro Kobayashi

CDS 2026 - Workshop - 0257 - Location-Based Wi-Fi AP Discovery Optimization for Vehicle-to-Infrastructure Communication - Hitoshi Morioka, Jing Ma and Yasuo Okabe

CDS 2026 - Workshop - 4775 - Lightweight and Stateless PUF-based Authentication Key Exchange Protocol for IoT Devices - Koki Mizoguchi, Rizka Reza Pahlevi, Hajime Shimada, Hirokazu Hasegawa and Hiroki Takakura

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CDS 2026 - Workshop - 5902 - Selective Privacy Protection in Speech Data: Suppressing Age Inference while Preserving Speaker Utility - Aoi Ito, Katunobu Itou and Ryuichi Nisimura

CDS - Workshop - 7760 - Performance Evaluation of EDHOC and COSE over MQTT in Constrained IoT Environments - Yeahjun Heo and Yasuo Okabe

8th IEEE International Workshop on Deep Analysis of Data-Driven Applications (DADA) - Session 2

21st IEEE International Workshop on e-Health Systems & Web Technologies (ESAS) - Session 2

20th IEEE International Workshop on Security, Trust, and Privacy for Software Applications (STPSA) - Session 2

Location: Sala Verde

Session Chair: Akbar Namin, Texas Tech University

DADA 2026 - Full - 9309 - Machine Learning-Based Assessment of Body Roundness Index and Cardiovascular Disease Risk in Older Adults: U.S.-China Evidence - Ran An and Yulei Pang

DADA 2026 - Full - 4414 - GDGraph: Geometry-Enhanced Dual-View Graph for Molecular Representation Learning - Yu Liu, Jonathan D Hirst, Jianfeng Ren, Bencan Tang and Dave Towey

ESAS 2026 - Workshop - 6765 - Smart Student Attendance System With Face Recognition - Yiltan Bitirim, Anıl Türk, Osman Ata Nurçin, Tuncay Sultanzade, Önsen Toygar, Duygu Çelik Ertuğrul and Erol Efe Karaköse

ESAS 2026 - Workshop - 3717 - Machine Learning-Based Classification of Turkish Municipal Complaints - Yiltan Bitirim, Akay Alptuğ, Mert Suat Muti, Necati Kırgız, Kadir Can Coşkun, Duygu Çelik Ertuğrul and Önsen Toygar

STPSA 2026 - Workshop - 2652 - AEGIS: Policy-Governed Vulnerability Management for CI/CD Software Security - Imad Abdallah and Lunjin Lu

STPSA 2026 - Workshop - 4683 - Key-Parametrized Embeddings for Access Control in Retrieval-Augmented Generation - Théo Thuillier, Léo Lavaur, Jérôme Francois, Radu State and William Ferguson

10:30 AM – 11:00 AM

Coffee Break

Location: First Floor Hall

11:00 AM – 12:30 PM

Opening Presentation: Workshop Chairs' Report

Plenary Keynote: *The Future of Compliance Automation*

Sheikh Iqbal Ahamed, Marquette University

Location: Room 26

Session Chair: Hossain Shahriar, University of West Florida

12:30 PM – 1:30 PM

Lunch Break

1:30 PM – 3:00 PM

14th IEEE International Workshop on Architecture, Design, Deployment, and Management of Networks and Applications (ADMNET) - Session 2

Location: Room 14

Session Chair: Motoyuki Ohmori, Tottori University

ADMNET 2026 - Workshop - 4870 - Secure Zero-Touch Provisioning of Wireless Mesh Networks with Roaming Under Disaster Situations - Chuang Li, Hideaki Goto and Takuo Suganuma

ADMNET 2026 - Workshop - 5275 - Cross-OS Container Transplantation: A Lightweight Defense Against Kernel and Network Exploits - Kotaro Sakamoto, Yuki Nakata, Katsuya Matsubara, Soma Sakaguchi and Suzuki Shintaro

ADMNET 2026 - Workshop - 6937 - Wi-Fi FTM Versus UWB for 3D Indoor Positioning - Marios Raptopoulos, Iacovos Ioannou and Nearchos Paspallis

ADMNET - Workshop - 4191 - Kubernetes-based Transparent Orchestration of Heterogeneous IoT Devices Through Peripheral Abstraction with WebAssembly - Soichiro Ueda, Ai Nozaki, Daisuke Kotani and Yasuo Okabe

ADMNET - Workshop - 3416 - Modeling and Optimization of Data Dissemination and Retrieval in Spatio-Temporal Data-Retention System - Ryo Nakamura, Makoto Misumi, Daiki Nobayashi, Kazuya Tsukamoto and Takeshi Ikenaga

ADMNET- Workshop - 4591 - Evaluating LLM Reasoning for GPU Occupancy Prediction in CUDA Kernels - Zarif Sadman, Mohammad Ali and Apan Qasem

Symposium on Computing Education & Learning Technologies (CELT) - Session 2

Location: Room 24

Session Chair: Henry Chan, The Hong Kong Polytechnic University

CELT - Full - 3252 - Building Flexible, Scalable AI + X Pathways for STEM-Adjacent Disciplines - Apan Qasem, Cindy Royal, Barbara Hewitt, Elise V Lambert and Pratheesh Omana Sudhakaran

CELT - Full - 0183 - Multimedia Learning through Agentic Educational Video Generation - Ping Him Lam and Henry Chan

CELT - Full - 7187 - OSSim: An Enhanced Interactive Web-Based Visualization System for Operating System Resource Management - Ting-Yu Su, Mei-Ling Chiang, Jou-En Chien, Sih-Bei Chen, Yun Han Hsu and Hsiao Tung Yang

CELT - Short - 6510 - Leveraging Different “Capture the Flag” Formats for Computer Science Education: Lessons from Two Case Studies - Sven Jörges, Holger Schmidt, Steve Bredebach and Calvin Kettmann

CELT - Short - 1023 - Design-Oriented Personalization in Microcredential Ecosystems: A Graph-Based Analysis of the DEH-EDVANCE - Sorana Cimpan, Cecilia Fissore, Francesco Floris,

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Marina Marchisio Conte and Sergio Rabellino

SEPT - Short - 0942 - A Multi-modal Detection Framework Based on Sensitive Behavior Chains for Android Malware Detection - Yiming Sun, Dongcheng Li and Hui Li

10th International Workshop on Metamorphic Testing (MET) - Session 1

Location: Room 23

Session Chair: Alejandro Guerra-Manzanares, University of Nottingham Ningbo China

MET 2026 - Workshop - 1210 - MC3: Model Checking for Crash Consistency of Full-Stack File Systems - Jingcheng Yuan and Toshiaki Aoki

MET 2026 - Workshop - 0803 - Testing the Untestable and Teaching How: Metamorphic Relations for Role-Based Access Control Security - Julianne Adwin, Dave Towey, Ge Zhang, Hongyu Wang and Jing Xu

MET 2026 - Workshop - 1182 - Seeing Metamorphic Relations Families as Types: Towards a New Foundation of Metamorphic Testing - Arnaud Gotlieb, Mathieu Le Louedec and Helge Spieker

MET 2026 - Workshop - 4546 - Temporal Metamorphic Testing for RAG-Based LLMs under Evolving Knowledge - Hongyu Wang, Dave Towey, Ge Zhang, Jing Xu and Julianne Adwin

MET 2026 - Workshop - 2520 - A Preliminary Exploration of Metamorphic Testing for Unity-Based Virtual Production Software - Ge Zhang, Dave Towey, Jing Xu, Julianne Adwin and Hongyu Wang

MET 2026 - Workshop - 8592 - Metamorphic Testing with the Rashomon Set: Explanation Faithfulness in Machine Learning - Helge Spieker, Jørn Eirik Betten and Arnaud Gotlieb

Special Session Society 5.0

Location: Room 22

Session Chair: Yasuo Okabe, Kyoto University

Showcasing Cutting-Edge Research Outcomes from JST's CREST, PRESTO, and ACT-X Programs

8th IEEE International Workshop on Deep Analysis of Data-Driven Applications (DADA) - Session 1

Location: Sala Torres Quevedo

Session Chair: Akbar Namin, Texas Tech University

DADA 2026 - Full - 6461 - Auditing Training Data in Domain-adapted LLMs: LoRA-MINT - Gonzalo Mancera, Daniel DeAlcala, Aythami Morales, Julian Fierrez, Ruben Tolosana and Francisco Jurado

DADA 2026 - Full - 9217 - Deep Learning-Based Landslide Early Warning: Forecasting with InSAR Time-Series - Bishesh Tuladhar, Ali Keivanmarz and Hamid Sharifzadeh

DADA 2026 - Full - 9354 - A Physics-Guided Multi-Task Learning KAN-Based Foundation Model for Vessel Fuel Consumption Prediction Across Heterogeneous Fleet - Hamza Haruna Mohammed, Dogan Altan, Dusica Marijan and Arnbjørn Maressa

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DADA 2026 - Full - 0334 - Resource-Aware Climate Modeling for Regional Adaptation under Data Scarcity - Maria Jose Pereira Dantas, João Victor Porto Fernandes, João Pedro Lemes Queiroz, Felipe Corrêa Veloso dos Santos, Norton Pereira Ricardo, Davi Aquila de Souza Dias, João Henrique Silva de Miranda, Carine Silva Santos, Rafaela Mota Silva, Salatiel Abraão Avelar Jordão and Reinaldo Roberto Rosa

DADA 2026 - Full - 1437 - Neuro-Agentive Control: A Deep Learning-based LLM-Powered Agentive AI Framework for Controlling Security Controls - Saroj Gopali

DADA 2026 - Full - 7379 - Explainability of Feature Relations in Malicious Network Data Based on Graph Attention Network - Tania-Amanda Nkoyo Fredrick Eneye

9th International Workshop on Advances in Artificial Intelligence and Machine Learning (AIML) - Session 2

Location: Room 26

Session Chair: Alfredo Cuzzocrea, University of Calabria

AIML 2026 - Workshop - 7868 - Comparative Study of Depth Anything V2 for Tree Trunk Diameter Estimation in Forest Environments - Silvio V. Miranda-Jr, Wellington Rodrigues, Marcos Lajovic Carneiro, Helio Pedrini, Juliana Felix and Fabrizzio Soares

AIML 2026 - Workshop - 7921 - HALPred-B: Host-Aware Linear B-Cell Epitope Prediction: Challenges, Limitations, and Variability Across Species - Purnima Gautam, Pralay Mitra and Ishaan Sinha

AIML 2026 - Workshop - 8789 - Characterizing LLM-Generated Synthetic Hate Speech in Portuguese: A Multi-Dimensional Corpus Comparison - Felipe Miranda Cardoso de Sa, Kéthlyn Silva, Deborah Fernandes, Márcio Fernandes and Fabrizzio Soares

AIML 2026 - Workshop - 8160 - Style and Stance Alignment in Reddit Discourse - Salatiel Jordão, Carine Santos, Felipe Santos and Maria Dantas

AIML 2026 - Workshop - 2370 - Transparency and bias auditing: A systematic review on explainability (XAI) and optimization in hate speech detection - Vitor Pires, Deborah Fernandes and Fabrizzio Soares

AIML 2026 - Workshop - 3655 - Is My Vision-Language Data in Your AI? Membership Inference Test (MINT) Demo 2 - Daniel DeAlcala, Aythami Morales, Julian Fierrez, Gonzalo Mancera, Ruben Tolosana and Ruben Vera-Rodriguez

20th IEEE International Workshop on Security, Trust, and Privacy for Software Applications (STPSA) - Session 1

Location: Sala Verde

Session Chair: Yasmeen Rawajfih, Tuskegee University

STPSA 2026 - Workshop - 8764 - SHADOW: A Hallucination-Aware LLM Agent for Automated CWE-Based Vulnerability Classification - Yasser Hmimou, Zineb Hidila, Mohamed Tabaa and Azeddine Khiaat

STPSA 2026 - Workshop - 4932 - Design and Implementation of an Authentication and Authorization Mechanism Based on Unix Domain Sockets - Haruka Kita, Yutaka Ishikawa, Atsuko

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Takefusa and Masato Oguchi

STPSA 2026 - Workshop - 7891 - Unveiling Security Traits of Cross-Platform Android Applications: A Large-Scale Empirical Study - Devin Sterling, Yash Patel, Samantha Zuza, Hyunbum Kim, Junggab Son and Daeyoung Kim

STPSA 2026 - Workshop - 2825 - A Lightweight Agentic Self-Adaptive Intrusion Detection System for Flow-Based Network Traffic - Mahmudul Prakash, ABM Kamrul Riad, Md Emran, Sajida Shabanali, Ishraq Karim, Tasnim Tawhid, Shafayet Hossain and Hossain Shahriar

STPSA 2026 - Workshop - 5820 - GenAI-Driven Agentic Cyber Defense: An Adaptive Fabric Framework for Cross-Layer Anomaly Detection and Autonomous Enforcement - Srikumeran Parameswaran, Bilash Saha, A B M Kamrul Islam Riad, Muhammad Asadur Rahman, Guillermo Francia III, Hossain Shahriar and M.A. Karim

3:00 PM – 3:30 PM

Coffee Break

Location: First Floor Hall

3:30 PM – 5:00 PM

4th IEEE International Workshop on Digital and Public Health (DIGI-HEALTH) - Session 2

Location: Room 26

Session Chair: Amina Mohammed Abdulla Almarzooqi, University of Sharjah

DIGI-HEALTH - Workshop - 0087 - Menstrual Cycle Prediction with Wearable and Personal Historical Information: Heterogeneous Effects Across Irregularity Profiles - Jing Xu, Dave Towey, Julianne Adwin, Hongyu Wang and Ge Zhang

DIGI-HEALTH 2026 - Workshop - 9315 - Large Language Models for Mental Health Support in Arabic-Speaking Populations: Cultural Adaptation, Challenges, and Ethical Considerations: A Perspective - Zainab Fatehi Albikawi, Mohammad Abuadas, Ahmad Rajeh Saifan and Fatma Refaat Ahmed

DIGI-HEALTH 2026 - Workshop - 2440 - Artificial Intelligence in Primary Health Care Centers: Opportunities, Challenges, and Implications for Nursing Practice - Mohammad Abuadas, Zainab Fatehi Albikawi, Rami Bashir Abu Rumman, Ahmad Rajeh Saifan, Fatma Refaat Ahmed and Sawsan Abuhammad

DIGI-HEALTH 2026 - Workshop - 0484 - Impact of Smartphone Use on the Health and Academic Performance Among University Students: Evidence from the University of Sharjah - Syed Azizur Rahman, Nabeel Al-Yateem, Amina Almarzouqi, Muhammad Arsyad Subu, Maryam Saeed Alhindaassi, Hamda Mersal Almaisari and Reshmi Raj

DIGI-HEALTH - Workshop - 7945 - Internet Addiction, Sleep Problems, and Premenstrual Symptoms Among Female Health-Field Students in the United Arab Emirates: A Cross-Sectional Study - Sawsan Abuhammad, Zahra Doudi, Alaa Alhakim, Athoub Hasan, Zainab Ahmed, Syed Azizur Rahman, Nabeel Al Yateem, Heba Hijazi, Muhammad Arsyad Subu and Ahlam Alhemedi

DIGI-HEALTH 2026 - Workshop - 7987 - Internet Addiction and Health-Related Quality of Life Among Female Health-Field Students in the United Arab Emirates: A Cross-Sectional Study -

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Sawsan Abuhammad, Athoub Hasan, Zainab Ahmed, Syed Azizur Rahman, Nabeel Al Yateem, Heba Hijazi, Muhammad Arsyad Subu, Fatma Ahmed, Hikmat Hadoush and Amira M Ali

9th International Workshop on Smart Computing and Applications (SCA) - Session 1

Location: Room 24

Session Chair: Chih-Hung Chang, Feng Chia University, Taiwan

SCA 2026 - Workshop - 7377 - A Generative AI Assistant for Infection Control: Integrating Large Language Models with Chatbots for Health Education - Hao-En Ho, Chih-Hung Chang, Yen-Heng Lin, Po-Yu Liu, Hsiu-Wen Wang and Chia-Chen Lin

SCA 2026 - Workshop - 2853 - Integrating ModelOps into Edge-Cloud Computing: Architecture and Implementation of a Centralized AI Lifecycle Management Platform - Wei-An Hong, Chih-Hung Chang, Yen-Heng Lin and Che-Lun Hung

SCA 2026 - Workshop - 0207 - Coalitional Game-Based Clustered Federated Learning for Mitigating Data Heterogeneity in Wireless Networks - Yu-Wei Chan, Jhih-Yu Tsai and Feng-Tsun Chien

SCA 2026 - Workshop - 7155 - Modeling Emotional Resonance for Empathy Activation: An Applied Data Science Framework in Education - Yun Zhang, Hongji Yang, Lin Liu and Zisen Zhou

SCA 2026 - Workshop - 2718 - A Comparative Study on Real-Time Joint Angle Estimation Accuracy Using MediaPipe-Based Methods - Chihyun Chiang and Tse Chuan Hsu

7th International Workshop on Rising ICT Solutions for Smart Grids as Multi-Energy Systems (ICT4SMARTGRID) - Session 1

Location: Room 23

Session Chair: Pietro Rando Mazzarino, Politecnico di Torino

ICT4SMARTGRID 2026 - Workshop - 2600 - Measuring the Cost of Trust: Blockchain Integrity Verification Overhead in Energy Digital Twin Pipelines - Silvio Meneguzzo, Nicolò Bertozzi, Marco Sacchet, Alessandro Mozzato and Alfredo Favenza

ICT4SMARTGRID 2026 - Workshop - 2075 - Efficient Placement in Distributed Co-Simulations of Multi-Energy Systems - Arianna Dragoni, Simone Reale, Davide Canali, Fabio Chini and Alessandro Margara

ICT4SMARTGRID 2026 - Workshop - 6236 - Sinergym: Evolution, Adoption, and New Directions for RL-Based Building Energy Optimization - Alejandro Campoy-Nieves, Antonio Manjavacas, Javier Jiménez-Raboso, Miguel Molina-Solana and Juan Gomez-Romero

ICT4SMARTGRID 2026 - Workshop - 4289 - CIM Wizard: A Flexible Framework for Automated CityJSON Generation from Sparse Urban Data - Ali Taherdoustmohammadi, Daniele Salvatore Schiera, Lorenzo Bottaccioli, Edoardo Patti and Pietro Rando Mazzarino

ICT4SMARTGRID 2026 - Workshop - 5949 - Simulation-as-a-Service for Energy Communities: A Scalable User-Facing Optimization Platform - Diogo Pereira, Pedro Rafael, João Soares, Hurdson Araújo and Sérgio Ramos

ICT4SMARTGRID 2026 - Workshop - 8756 - Feature engineering and LSTM-derived embeddings for winery energy forecasting - Carlos Roberto Souza Garcia Filho, Andreia Sofia Nunes Clemente

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Henrique, José Manuel Ribeiro Baptista, Ana Cristina Ribeiro Afonso de Matos, Ana Cristina Briga de Sá and Tiago Manuel Campelos Ferreira Pinto

ICT4SMARTGRID 2026 - Workshop - 3952 - Unlocking flexibility in local energy communities using a digital twin of flexible assets - Cesar Alberte Tapia, Daniel Fernández-Muñoz, Juan I. Pérez-Díaz, Martina Dell'Unto and Francesca Olivieri

11th International Workshop on Distributed Big Data Management (DBDM) - Session 1 IEEE International Workshop on Intelligent Systems for Human and Societal Wellbeing (ISHSW) - Session 1

Location: Room 22

Session Chair: Alfredo Cuzzocrea, University of Calabria

DBDM 2026 - Workshop - 7556 - GateKV: Gateway-utilized Distributed Key-Value Store for Edge Networks - Erblina Nivokazi, Batuhan Can and Tolga Ovatman

DBDM 2026 - Workshop - 6546 - Explainable Industrial Big Data Exploration via Knowledge-Augmented Analytics: A Vision on Architecture, Scenarios, and Open Challenges - Devis Bianchini, Valeria De Antonellis, Massimiliano Garda and Michele Melchiori

DBDM 2026 - Workshop - 1265 - Management, Analytics and Prediction on Big Sports Data - Max Kaplan, Carson Leung and Alfredo Cuzzocrea

DBDM 2026 - Workshop - 5938 - Managing and analyzing big railway data - Savan Golakiya, Carson Leung, Maitrik Rajai and Alfredo Cuzzocrea

ISHSW 2026 - Workshop - 0240 - A Fretting Position Estimation System using Audio Guided Guitar Performance Video Analysis - Yuki Nakayama, Hayato Tomisu, Tomoki Yoshihisa, Shota Morita and Hiroyasu Matsushima

18th IEEE International Workshop on Security Aspects in Processes and Systems Engineering (SAPSE) - Session 1

Location: Sala Torres Quevedo

Session Chair: Sajida Shabanali, University of West Florida

SAPSE 2026 - Workshop - 9401 - Threat and Risk Analysis for Human-Augmentation Robots: Use-cases from Robots Working in the Real Society - Daiya Kato, Yu Tsuda, Hideki Sunahara and Masaaki Sato

SAPSE 2026 - Workshop - 9267 - Semi-Online Authentication and Accounting Framework for WLAN Roaming - Xirui Yang, Hideaki Goto and Takuo Suganuma

SAPSE 2026 - Workshop - 5538 - A Post-Processing Heuristic for the Static Separation of Permissions Problem - Carlo Blundo and Stelvio Cimato

SAPSE 2026 - Workshop - 6094 - A Novel Blockchain Framework for Balancing The Transparency-Privacy Trade-off in Cross-Border Regulatory Compliance for MedTech Supply Chains - Sana Ullah, Muslim Jameel Syed and Meghann Drury-Grogan

SAPSE 2026 - Workshop - 8701 - Scalable Approach for Zero-Knowledge Proofs (ZKP): Reducing Proving Time with KZG Commitments - Jahan Zeb Shahid and Stelvio Cimato

16th IEEE International Workshop on Network Technologies for Security, Administration & Protection (NETSAP) - Session 1

Location: Room 14

Session Chair: AKM Jahangir Majumder, University of South Carolina Upstate

NETSAP 2026 - Workshop - 3550 - Evaluating AI-Powered Honeypots for Edge Security: Threat Detection Performance on Resource-Constrained IoT Devices - Samuel Barry, Kehinde Babaagba and Zhiyuan Tan

NETSAP 2026 - Workshop - 7216 - An Approach for Detecting Vulnerable TLS Connections Through Network Monitoring, Intrusion Detection and TLS Testing Tools - Diana Gratiela Berbecaru and Antonio Lioy

NETSAP 2026 - Workshop - 4882 - A Masked-Frozen Approach to Reliable and Secure PUF-Based Authentication - Rizka Reza Pahlevi, Hirokazu Hasegawa, Yukiko Yamaguchi and Hajime Shimada

NETSAP 2026 - Workshop - 5550 - Transferability of the GCG Attack across LLMs: Correlation with Attention Similarity and Transfer Rate Prediction - Kazuki Takaki, Hajime Shimada, Yukiko Yamaguchi and Hirokazu Hasegawa

NETSAP 2026 - Workshop - 5477 - Automated Attack Trace Generation: Investigating Coverage and Cleanup Resilience - Masahito Kumazaki, Daisuke Kotani and Yasuo Okabe

NETSAP 2026 - Workshop - 4662 - An Empirical Study on Multi-Label Classification of Mixed VPN-Encrypted Traffic - Masahiro Ishii

**IEEE International Workshop on Trustworthy Agri-Data Management (TADM) - Session 1
10th International Workshop on Metamorphic Testing (MET) - Session 2**

Location: Sala Verde

Session Chair: Dr. Ioannis Karvelas, SingularLogic

TADM 2026 - Workshop - 5471 - Tree Diameter Estimation Using LiDAR-Equipped Smartphones for Forest Inventory Applications - Allan Kardec Lopes, Welington Rodrigues, Thamer Nascimento, Juliana Felix, Helio Pedrini and Fabrizzio Soares

TADM 2026 - Workshop - 6738 - Mapping the Landscape of Actors, Technologies, and Business Models in Agribusiness Data Ecosystems: Perspectives from Actor-Network and Stakeholder Theories - Samin Ghalandarzadeh, Shahin Rezvanian, Arianit Kurti, Cecilia Unell and Katarina Stanoevska-Slabeva

TADM 2026 - Workshop - 1515 - VoiceAgriNet: Dual-Agent Voice Interaction for Trustworthy Data Collection and Retrieval from Smallholder Farmers - Nur Arifin Akbar and Rahool Demhani

TADM 2026 - Workshop - 7416 - Towards a FAIR-Trust Nexus in Agri-Data Governance: A Design Science Research Study - Erica Tegolo, Áine Regan, Stuart Green, Zohreh Pourzolfaghar and Markus Helfert

TADM 2026 - Workshop - 1611 - An Empirical Study of Turbidity Forecasting on Open

Aquaponics Sensor Data - Yipeng Xu, Lijie Zhou, Alejandro Guerra-Manzanares, Kwadwo Dompseh, Siegfried Yeboah and Matthew Pike

TADM 2026 - Workshop - 3340 - Farmers' Willingness to Share Agricultural Data: Does the 'With Whom' Matter? - Clare Sullivan

MET - Workshop - 3658 - Multi-Agent Specification-based Metamorphic Testing of FMU-Based Simulations - Ashir Kulshreshtha, Gaadha Sudheerbabu, Abdullah Mughees, Tanwir Ahmad, Kristian Klemets, Dragos Truscan and Mikael Manngård

12th IEEE International Workshop on Medical Computing (MediComp) - Session 2
14th IEEE International Workshop on Consumer Devices, Systems and Services (CDS) - Session 2

Location: Room 46

Session Chair: Prof. Jianqiang Li, Beijing University of Technology, China

MediComp - Workshop - 3995 - Gene Expression-Based Survival Modeling for Recurrence Risk Prediction in Stomach Adenocarcinoma - Saanvi Kulkarni and Pallavi Bajpai

MediComp - Workshop - 8252 - Metric-Driven Analysis of SMOTE Efficacy in Colorectal Metastasis Prediction - Aurea Silva, Danilo Zuccati Oliveira, Juliana Paula Felix and Plinio de Sa Leitao-Junior

MediComp - Workshop - 7785 - Parkinson's Disease Detection from Keystroke Dynamics Using Machine Learning - Ana Luisa de Bastos Chagas, Pedro Lemes Sixel Lobo, Rogerio Salvini, Marcos Lajovic Carneiro, Fabrizio Soares and Juliana Felix

MediComp - Workshop - 1400 - Fairness-Aware Evaluation of Classical Machine Learning Models for Glaucoma Detection in OCT Images - Pedro Soares, Antonio Cordeiro, Marcos Carneiro, Thamer Nascimento, Fabrizio Soares and Juliana Felix

CDS 2026 - Workshop - 5102 - Evaluating Gesture Recognition Robustness on Smartwatches: A Comparison Between User-Dependent and User-Independent Protocols - Thamer Nascimento, Leonardo Yago Nascimento Silva, Marcos Vieira, Deborah Fernandes, Juliana Felix and Fabrizio Soares

ONLINE PAPER PRESENTATIONS

COMPSAC 2026 Symposium on Applied Artificial Intelligence (AAI)

AAI – COMPSAC 2026 - Full - 0820 - Evidence-Based Reliability Estimation in Deep Neural Networks using Dempster-Shafer Theory - Ahsan Waseem, Alexander Perez Pons, Muhammad Nadeem, Hossain Shahriar and Mohammad Ashiqur Rahman

AAI – COMPSAC 2026 - Full - 2941 - Doc2Presenter: Graph-Constrained Multimodal Generation of Talking-Head Presentation Videos - Zhongyi Liu, Haifeng Liang, Cheng Lin, Xiansong Xu and Junqi Lu

AAI – COMPSAC 2026 - Full - 4566 - Agentic AI for EEG-Based Brain-Computer Interfaces: A Review of Methods, Systems, and Applications - Masud Rabbani, Rubaba Amyeen, Md Mazhar Hossain, Mostafa Rafid, Iyssa Iqbal, Hansika Kolli and Sheikh Iqbal Ahamed

AAI – COMPSAC 2026 - Short - 0447 - From Supervised Baselines to Positive Unlabeled Learning Fake News Detection on the TruthSeeker2023 GroundTruth - Vishnu Rohith Nanduri, Feroz Ahmed and Dr Charan Gudla

AAI – COMPSAC 2026 - Short - 6267 - RAILS-DK: Dynamic Knowledge Management for Retrieval-Augmented Code Repair in Scientific Computing - Wali Mohammad Abdullah, Md Morshedul Islam, Sayeed Islam, Baidya Nath Saha and Hossain Shahriar

AAI – COMPSAC 2026 - Short - 9078 - Deep Learning for Event-Driven Market Prediction: A Transformer-Based Model for Misinformation-Induced Volatility - Xuemin Deng and Desheng Wu

AAI - Short - 9926 - Congestion-Aware Scheduling for Heterogeneous LLM Agent Teams - Weiqi Xie and Yuyao Li

The 1st International Workshop on AI and Forensics and Cybersecurity (AIFC 2026)

AIFC 2026 - Workshop - 3633 - A Lightweight Multi Factor Authentication Scheme Designed for the Metaverse - Yuanguang Zhu and Guangshun Li

AIFC 2026 - Workshop - 3868 - From Jargon to Action: Evaluating Open LLMs for Plain Language Summaries of Pentest Reports - Prerit Datta, Mohammed Islam and Ryan Wojciechowski

AIFC 2026 - Workshop - 4509 - Forensic Attribution and Targeted Regression Detection for AI-Generated Security Patches - Adiba Mahmud, Yasmeen Rawajfih, Ross Arnold and Hossain Shahriar

9th International Workshop on Advances in Artificial Intelligence and Machine Learning (AIML 2026)

AIML 2026 - Workshop - 0065 - Proactive Multi-Agent Systems for Autonomous Code Generation and Software Maintenance in Enterprise Environments - Saher Elsayed, Sameer Abubaker, Mohamed Ali and Mohammed E. Elbity

AIML 2026 - Workshop - 1742 - Binary Representation of NLP Embeddings Using Spiking Neural Networks - Soumen Sinha and Shahryar Rahnamayan

AIML 2026 - Workshop - 0628 - STARDTOX: Is Fairness in Language Models Just a Few Prompts Away? - Shirin Tahmasebi, Narjes Nikzad Khasmakhi, Amir H. Payberah, Meysam Asgarichenaghlou and Mihhail Matskin

ONLINE PAPER PRESENTATIONS

COMPSAC 2026 Symposium on Autonomous Systems (ASYS)

ASYS – COMPSAC 2026 - Short - 0869 - Tri-LaneNet: Enhancing Intelligent Transportation Systems Perception Capabilities - Chufeng Jiang and Heng Li

ASYS - Full - 3797 - Provenance-Aware Trust Framework for Autonomous Vehicles: A Generative AI-Inspired Hybrid Approach for Decentralized Information Validation - N. M. Istiak Chowdhury, Mohammad Zakaria Haider, Mohammad Ashiqur Rahman and Ragib Hasan

COMPSAC 2026 Symposium on BlockChain (BEST)

BEST – COMPSAC 2026 - Full - 8458 - A Secure and Trustworthy Digital Passport System Using Self-Sovereign Identity and Blockchain - Sifat Jahan Sajin, Mohammad Mahmudul Haque Siam, Abdullah Al Anan, Sunjid Ibnul Anim, Md Yeasin Ali, Shahriar Hossain and Md Sadek Ferdous

BEST – COMPSAC 2026 - Full - 9327 - T-DAA: Dynamic Account Allocation for Blockchain Sharding Based on Time-Decay Weighted Graph - Bo Wei, Zhongyong Guo, Yibing Li, Weilong Gong and Yangjie Cao

BEST – COMPSAC 2026 - Short - 7985 - Secure and Scalable Dynamic Blockchain Sharding via a Multi-Granularity Reputation Model - Jie Li, Zhihao Guo, Yibing Li and Yangjie Cao

BEST - Full - 9275 - SD-MIL: A Two-Stage De-noising Framework for Smart Contract Vulnerability Detection via Multi-Instance Learning - Jiaying Xie, Yanxiang Tong, Xiao Wang, Shunhui Ji and Pengcheng Zhang

BEST - Full - 2783 - LLM-driven Smart Contract Vulnerability Detection Based on Heterogeneous Graphs - Yunhan Zhang, Yanxiang Tong, Ben Wang, Shunhui Ji and Pengcheng Zhang

BEST - Full - 6055 - MGR-Net: Multimodal Fusion Network for Ponzi Scheme Detection Based on Graph Refinement - Jinqi Lei, Yanxiang Tong, Xiao Wang, Shunhui Ji and Pengcheng Zhang

COMPSAC 2026 Symposium on Computer Architecture & Platforms (CAP)

CAP – COMPSAC 2026 - Short - 9580 - UeFS: An Offload-enabled User-space Encrypted File System - Yiao Liao, Ming Zha, Liang Lu, Ruizheng Huang, Xiaoyun Zhang, Liuwei Huo and Yong Wang

CAP - Short - 6793 - Pico-Cloud: Cloud Infrastructure for Tiny Edge Devices - Mordechai Guri

COMPSAC 2026 Symposium on Cognitive Robotic Systems (CRoS)

CRoS - Short - 2467 - Enhancing the Safety Horizon: Robust Uncertainty Quantification for Monocular Autonomous Navigation - David Joshua Estrera and Judith Azcarraga

4th IEEE International Workshop on Digital and Public Health (DIGI-HEALTH 2026)

DIGI-HEALTH 2026 - Workshop - 0954 - Scoping Review of Stress in Accessible Computing: Camera-Based Sensing for Inclusive Digital Accessibility - Nafi Us Sabbir Sabith, Nathaniel Parise, Jodi Pierre, Tasnia Zaman, Rochelle Mendonca, Suzanne Perea Burns, Sabirat Rubya and Sheikh Iqbal Ahamed

DIGI-HEALTH 2026 - Workshop - 9900 - Unsafe Use of ChatGPT Among Nursing Students: Prevalence, Predictors, and the Protective Role of Faculty Guidance - Heba Khalil, Nabeel Al Yateem, Fatma Ahmed, Abedalmajeed Shajrawi, Wegdan Bani-Issa, Samia Kouki, Vidya Seshan,

ONLINE PAPER PRESENTATIONS

Jacqueline Dias, Muhammad Subu and Khalil Yousef

DIGI-HEALTH 2026 - Workshop - 7299 - Digital Transformation Readiness Among Nursing Students: A Preliminary Pilot Qualitative Exploratory Study Using Playful-Reflective Workshops - Fatma Refaat Ahmed, Nabeel Al-Yateem, Amina Ahmed, Wegdan Banni Issa, Syed Rahman, Sawsan Abuhammad, Heba Khalil, Jacqueline Maria Dias, Muhammad Arsyad Subu, Mini Sara Abraham, Ahmed Rajeh Saifan, Zainab Fatehi Albikawi, Mohammad Abuadas, Muna Al-Tamimi, Alounoud Salman and Amina Almarzouqi

COMPSAC 2026 Symposium on Data Sciences, Analytics, & Technologies (DSAT)

DSAT - Short - 5730 - A sequence feature-based deep learning framework for automatic family classification of the small non-coding RNA - Nandita Sharma and Pralay Mitra

6th IEEE International Workshop on Dynamic Data Science and Big Data Analytics in Finance (DDS-BDAF 2026)

DDS-BDAF 2026 - Workshop - 0118 - A Study On Long-Horizon Stock Forecasting Failures with Deep Sequential Models - Joy Dip Das, Ruppa Thulasiram, Abhinav Jain and Aerambamoorthy Thavaneswaran

COMPSAC 2026 Symposium on Emerging Advances in Technologies & Applications (EATA)

EATA – COMPSAC 2026 - Full - 0122 - CausaLLM-Graph: An Explainable LLM-based Fault Diagnosis Framework for Microservice Applications with Causal Graphs - Jun Zhu, Lei Feng and Mingyue Zhang

EATA - Full - 1976 - Evo-AA: Evolution-Aware Adaptation of Protein Language Models - Yuxuan Wu, Huiqun Yu, Guisheng Fan and Hengrun Zhang

Fast Abstract (FA 2026)

Fast Abstracts(FA) - FA - 1212 - CrossRPL: Propagation-Aware Detection and Function-Level Localization of Cross-Contract Vulnerabilities in Ethereum Smart Contracts - Rexford Nii Ayitey Sosu, Jinfu Chen, Edward Kwadwo Boahen, Saihua Cai and Zhehao Li

Fast Abstracts(FA) - FA - 4667 - CPSA-VD: Contrastive Cross-Procedural Semantic Alignment for Vulnerability Detection - Ziyang Liu, Jinfu Chen, Saihua Cai and Zhangpei Huang

Fast Abstracts(FA) - FA - 6122 - CAN We Detect It? A Deep Dive into Intrusion Detection for IVNs - Khang Le, Abhi Chatterjee, Moitrayee Chatterjee and Chandrani Gupta Chowdhury

FA - FA - 7878 - Usability Study of AI-Based Stress Management Support among College Students - Abhi Chatterjee, Ankita Banik and J.D Jayaraman

COMPSAC 2026 Symposium on Human Computing & Social Computing (HCSC)

HCSC - Full - 7898 - Building an Ableist Language Database with Human-in-the-Loop Methodology: Promoting Inclusive Discourse in Autism Research - Connor Costello, Greyson Pendas, Maria Iliescu, Yudong Liu and Shameem Ahmed

HCSC - Full - 9517 - Autonomy, Safety, and Social Design: Towards Designing Effective and Inclusive Technologies for Autistic Young Adults - Aishwarya Manjunath, Alex Wolf, Hanze Aggabao, Brady Deyak, Nahom Azmach, Anurata Prabha Hridi and Moushumi Sharmin

ONLINE PAPER PRESENTATIONS

COMPSAC 2026 Symposium on IT in Practice (ITiP)

ITiP - Short - 8902 - Bitcoin Loyalty Programs for SMBs: Quantifying Cashback-Driven Wealth Effects and Local Economic Multipliers - Ali Farhani, Saulo Quinteiro Dos Santos, Joy Dip Das and Ruppa Thulasiram

12th IEEE International Workshop on Medical Computing (MediComp 2026)

MediComp 2026 - Workshop - 1287 - ENSEMBLING CONVOLUTIONAL AND TRANSFORMER ARCHITECTURES FOR RETINOPATHY OF PREMATURITY SCREENING IN NEONATAL FUNDUS IMAGES - Hanish Acharla

MediComp - Workshop - 4718 - Prior-Informed Normative EEG Scoring for Alzheimer's Detection: Framework and Cross-Paradigm Boundary Analysis - Harihar Rengan, Ali-Mansur Valiyev, Ryan Borui Zhu, Chi-Wai Do and Eugene Yujun Fu

10th International Workshop on Metamorphic Testing (MET 2026)

MET 2026 - Workshop - 3464 - Metamorphic Non-Functional Testing for Web Services: A Statistical Approach and A Case Study on Request-Latency Relations - Abrar Hossain Chy Toha, Huai Liu and Mengjiao Guo

20th IEEE International Workshop on Quality Oriented Reuse of Software (QUORS 2026)

QUORS 2026 - Workshop - 3973 - The Multi-Tenant Customization Paradox: Formalizing the Intrinsic Conflict Between Scalable Shared Codebases and Tenant-Specific Operational Customization in SaaS Architecture - Sachila Manamperi, Rivin Jayasuriya, Avishka Wickramasooriya, Thusala Piyarisi, Dharshana Kasthurirathna and Samantha Thelijagoda

18th IEEE International Workshop on Security Aspects in Processes and Systems Engineering (SAPSE 2026)

SAPSE 2026 - Workshop - 8185 - Portus: A Resource-Safe Electronic Bill of Lading Protocol on IOTA Move with Cross-Platform Interoperability - Silvio Meneguzzo and Stefano Leto

9th International Workshop on Smart Computing and Applications (SCA 2026)

SCA - Workshop - 5531 - Agentic Retrieval-Augmented Generation for Sustainable ETL Architecture: Automated Documentation and Design Quality Assessment to Support Carbon-Aware Data Pipelines - Mayur Jain and Muhammad Abdul Basit Ur Rahim

COMPSAC 2026 Symposium on Smart & Connected Health (SCH)

SCH – COMPSAC 2026 - Full - 5898 - dDream: A Smartphone-Based Comprehensive and Scalable Multi-Parameter Physiological Monitoring Platform - Sayed Mashroor Mamun, Kazi Shafiul Alam, Kazi Zawad Arefin, Nafi Us Sabbir Sabith, Masud Rabbani and Sheikh Iqbal Ahamed

SCH – COMPSAC 2026 - Full - 7730 - Personalized Fall Detection by Balancing Data with Selective Feedback Using Contrastive Learning - Awatif Yasmin, Tarek Mahmud, Sana Alamgeer and Anne Ngu

SCH – COMPSAC 2026 - Full - 9479 - A Quantitative EPSS-Based Risk Scoring Framework for HIPAA Technical Safeguards in Mobile Healthcare Applications - Md Bajlur Rashid, Shuvo Bardhan, Tasmiah Rahman, Md Abdul Barek, Md Raihan Mia, Hansika Kolli, Naveed Ashfaq, Hossain Shahriar and Sheikh Iqbal Ahamed

SCH - Full - 7320 - LabOrchestrator: An AI Framework for End-to-End Security in Medical

ONLINE PAPER PRESENTATIONS

Research Environments - Sharif Noor Zisad and Ragib Hasan

SCH - Full - 2019 - Fairness Definitions and Metrics in Deep Reinforcement Learning for Drug Discovery in Healthcare: A Rapid Evidence Review - Esmaeil Shakeri, Ronnie de Souza Santos and Behrouz Far

COMPSAC 2026 Symposium on Security, Privacy, & Trust in Computing (SEPT)

SEPT – COMPSAC 2026 - Full - 1141 - A Comparative Analysis of Security Vulnerabilities and Defense Mechanisms in Large Language Models - Md Abdul Barek, Md Bajlur Rashid, Abm Kamrul Islam Riad, Guillermo Francia III, Coskun Cetinkaya, Shahriar Hossain, Muhammad Umair Khan and Sheikh Iqbal Ahamed

SEPT – COMPSAC 2026 - Full - 6867 - RPPFL: Random Projection-Based Personalized Federated Learning for IoT Intrusion Detection - Md Morshedul Islam, Hossain Shahriar, Alfredo Cuzzocrea, Muhammad Rahman, Fan Wu and Md Jobair Hossain Faruk

SEPT – COMPSAC 2026 - Full - 7638 - Structural Inference in Undocumented Mobile Databases: A Reproducible Benchmark for Evaluating Agentic Reasoning in Digital Forensics - Jeel Piyushkumar Khatiwala, Divyangkumar Patel and Weifeng Xu

SEPT – COMPSAC 2026 - Short - 4788 - RAPTOR: Adversarially Robust Path Planning for LiDAR-Based Autonomous Robotic Vehicles - Alejandro Almeida, Daniel Andres Aviles Rueda, Nur Imtiazul Haque, Sheikh Iqbal Ahamed and Mohammad Ashiqur Rahman

SEPT – COMPSAC 2026 - Short - 6123 - Evaluating FIDO2: Security and Cross-Platform Adoption on Various Mobile Devices - Puyuan Sun, Md Yeasin Ali, Hossain Shahriar and Md Sadek Ferdous

SEPT – COMPSAC 2026 - Short - 6216 - Security Risks in Tool-Enabled AI Agents: A Systematic Analysis of Privileged Execution Environments - Hardik Goel

SEPT - Full - 7916 - Measuring the Reasoning Boundaries of Large Language Models for Implicit Security Invariants in Code: A Controlled Empirical Study - Ruofei Wang, Honglin Zhuang, Huayang Cao and Siqi Chen

SEPT - Full - 7918 - Browser Fingerprinting Using WebAssembly - Mordechai Guri and Dor Fibert

10th IEEE International Workshop on Software Engineering for Smart Systems (SESS 2026)

SESS 2026 - Workshop - 9511 - A Model-Driven Methodology for Embedding AI Bias Requirements into SysML: Application to Smart-Home early Chronic Kidney Disease (CKD) Systems - Sofia Meacham, Frank Grimm, Keith Phalp, Nikita Machado and Samruddhi Kalpana Manohar Pawar

SESS 2026 - Workshop - 0583 - Engineering Guided Determinism in Neuro-Symbolic Agents: A Comparative Study of Orchestration Strategies for Supply Chain Replenishment - S M Nahian Al Sunny, Liyaqatali Nadaf, Gaurav Kumar Srivastav, Sandeep Singh, Yaswanth Reddy Manukonda and Mina Panahi

COMPSAC 2026 Symposium on Software Engineering Technologies & Applications

SETA – COMPSAC 2026 - Full - 2185 - An Improved Entropy-Based Data Cleaning Approach to Handle Class Overlap on Aging-Related Bugs Prediction - Ruilong Ding, Jing Liu and Bo Cui

SETA – COMPSAC 2026 - Full - 2367 - CovCraft: LLM-Guided Intelligent Framework for Constraint-Based Testing of Deep Learning Compiler Pipelines - Yifei He, Fangyuan Yang, Ting Su, Yueling Zhang and Geguang Pu

SETA – COMPSAC 2026 - Full - 9826 - Diagnosing and Resolving Android Applications Building Issues: An Empirical Study - Lakshmi Priya Bodepudi, Yutong Zhao, Ming Quan Fu, Yuanyuan Wu, Sen He and Yu Zhao

SETA – COMPSAC 2026 - Short - 1697 - GLIMPSE: Global LLM-Driven Template Merging for Unsupervised Log Parsing - Xiancong Meng, Le Zhang, Jiaxu Chen and Yaping Chi

SETA - Full - 7115 - GVFL: Variable Level Fault Localization Using Graph Representation Learning - Xia Song, Xiaojie Fan, Ruishi Huang, Hengyuan Liu and Zheng Li

SETA - Short - 8760 - RustDAP: Lightweight Rust Vulnerability Detection Method via LLM-based Data Augmentation and Semantic-Structural Prompting - Chenghuan Ye, Zhibin Yang, Yong Zhou, Zhixun Wang, Yuanrui Zhang and Chengwei Liu

SETA - Full - 6099 - REE: A Cooperative Framework for Robust and Explainable Vulnerability Detection - Lele Zhong, Junxia Guo and Fa Zhong

COMPSAC 2026 Symposium on Smart IoT Systems & Applications

SloT – COMPSAC 2026 - Short - 8794 - FedEdge-Adapt: Adaptive Federated Learning with Heterogeneity-Aware Compression and Straggler Mitigation for Resource-Constrained Edge AI Systems - Saher Elsayed, Mohamed Ali, Samer Abubaker and Mohammed Elbtity

SloT - Short - 6943 - ABCD: Active Buildings with Computing, Distributed Sensing, and Secure Edge Collaboration for Autonomous Hazard Mitigation - Md Ismail Hossain, Nasim Uddin and Ragib Hasan

SIOT - Short - 4919 - CriticIDS: LLM-Augmented Intrusion Detection with AutoML and Explainability for IoT Networks - Tasnimul Hasan and Samia Tasnim

Student Research Symposium (SRS 2026)

SRS 2026 - SRS - 1614 - Mitigating Catastrophic Forgetting in Android Malware Classification via Incremental Knowledge Distillation and Adaptive Memory Replay - Kun Wang, Jinfu Chen, Saihua Cai, Bingbing Yin and Zhancheng Ye

SRS 2026 - SRS - 9212 - The Alignment Paradox: Emotional Flattening and Social Safety Risks in Proactive AI Agents - Ajitesh Sharma, Pranav Rayban, Aarya Nagvekar and Jaishree Jaikrishnan

20th IEEE International Workshop on Security, Trust, and Privacy for Software Applications (STPSA 2026)

STPSA 2026 - Workshop - 1044 - Trust Score Reliability in LLM Security Pipelines: A Severity-Stratified Calibration Study with KEV Validation - Adiba Mahmud, Yasmeen Rawajfih, Ross Arnold and Hossain Shahriar

STPSA 2026 - Workshop - 9175 - Trust-Aware Agentic RAG: A Hybrid Vector-Graph Architectural Framework for Regulated AI Systems - Sivarama Krishna Akhil Koduri

STPSA 2026 - Workshop - 9179 - SENTINEL: Spectral-Entropy Byzantine Detection for Provably Robust Federated Learning Under Non-IID Data and Adaptive Adversaries - Saher Elsayed, Mohamed Ali, Samer Abubaker and Mohammed Elbtity

STPSA 2026 - Workshop - 9331 - Importance of Secure Programming Education at the Academic Levels: A Preliminary Survey - Jeremiah Kotey, Roxanne Caicedo and Kazi Zakia Sultana

STPSA 2026 - Workshop - 9759 - Engineering Trust in LLM Supply Chains through Hybrid Post-Quantum Artifact Signatures - Rafael Silva and Luiz Duarte



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COMPSAC 2027

*Trusted Agentic Ecosystems Engineering
for Autonomous Intelligence*

Tokyo, Japan | July 13-16, 2027

CALL FOR PAPERS

The 51st IEEE International Conference on Computers, Software, and Applications (COMPSAC 2027) will be held in Tokyo, Japan on July 13-16, 2027. The conference theme is Trusted Agentic Ecosystems Engineering for Autonomous Intelligence. COMPSAC 2027 will focus on research and development of Trusted Agentic Ecosystems and related computing technologies for their eventual integration into all aspects of society. COMPSAC 2027 will bring together researchers, developers, practitioners, and policymakers worldwide to discuss the latest advances in their fields and their challenges.

The rapid evolution of agentic computing is driving a structural transformation in how complex software systems are specified, composed, and validated. As we shift from reactive computing models to proactive, autonomous ecosystems, we unlock unprecedented opportunities—but also face critical challenges in trust, reliability, security, and human alignment. Autonomous agents—endowed with goal-directed policies, adaptive reasoning, and decentralized coordination capabilities—are increasingly embedded within heterogeneous, multi-layered execution environments and computational substrates. These span cloud infrastructures, edge clusters, personal devices, and safety-critical cyber-physical systems. A primary frontier for these ecosystems is Digital Health, where autonomous agents can revolutionize personalized medicine, remote patient monitoring, and clinical decision support through secure and reliable intelligence. This paradigm shift demands a fundamental re-architecture of modern software, requiring rigorous advances in formal foundations, engineering methodologies, and assurance mechanisms to guarantee trustworthy, modern software systems.

This conference invites researchers, practitioners, and visionaries to share their insights, innovations, and experiences in developing and deploying intelligent trusted systems that address real-world challenges. Emerging technologies such as quantum computing and blockchain will also be highlighted, as they hold the potential to unlock new frontiers in computing and engineering by enabling more powerful simulations, secure data sharing, and resilient systems.

IMPORTANT DATES

Workshop proposals due
October 15, 2026

Workshop proposal notification
November 16, 2026

Full papers due
January 31, 2027

Paper notification
April 7, 2027

Workshop papers due
April 15, 2027

Workshop papers notification
May 1, 2027

Camera-ready copy
June 1, 2027

KEY ORGANIZERS

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