2026 10th International Conference on Computer, Software and Modeling (ICCSM 2026)

2026 10th International Conference on Education and Distance Learning (ICEDL 2026)

Nice, France
July 03-05, 2026

Sponsored by

UNIVERSITÉ HAUTE-ALSACE

Hosted by

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UNIVERSITÀ DEGLI STUDI DI BARI ALDO MORO
UNIVERSITAT DE BARCELONA
Università degli Studi Mediterranea di Reggio Calabria

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WELCOME MESSAGE

Dear distinguished guests,

We are honored to introduce you to 2026 10th International Conference on Computer, Software and Modeling (ICCSM 2026) & 2026 10th International Conference on Education and Distance Learning (ICEDL 2026), held in Nice, France during July 03-05, 2026, which are sponsored by Université de Haute-Alsace, hosted by CESI Nice, and technical supported by University of Bari, Italy, University of Barcelona and so on.

ICCSM & ICEDL consist of 13 keynote/invited speeches, successively delivered by:

- Prof. Stefano Secci, Conservatoire National des Arts et Métiers (Cnam), France
- Prof. Giuseppe Ritella, University of Campania "Luigi Vanvitelli", Italy
- Prof. Merouane Debbah, Khalifa University, Abu Dhabi
- Prof. Samir Ouchani, CESI LINEACT, France
- Prof. Vania Conan, Conservatoire National des Arts et Métiers, Paris, France
- Assoc. Prof. Yuya Ieiri, Waseda University, Japan
- Prof. Amirouche. Farid, University of Illinois Chicago, USA
- Prof. Jean Max Tavares, Pontifical Catholic University of Minas Gerais, Brazil
- Dr. Mahdi Madani, Université Bourgogne Europe, France
- Dr. Alex Pak Ki Kwok, The Chinese University of Hong Kong, Hong Kong, China
- Dr. Paulo Batista, University of Évora, Portugal
- Assoc. Prof. Maria Concetta Carruba, Pegaso University, Italy
- Prof. Nianyin Zeng, Xiamen University, China

Followed by 8 onsite/online sessions, with topics:

- Community Interaction Dynamics: Human, Social-Psychological, and Robotic Perspectives
- Machine Learning Theory and Data Computing Models
- Education Simulation and Learning Experience Based on Virtual Technology
- AI Driven Learning Mode and Digital Health System
- Teacher Professional Development and Teaching Quality Evaluation
- Cloud-based Privacy Protection and Information Security
- Machine Learning Driven Information Security and Intelligent Networks
- AI Empowered Information Education and Intelligent Learning System

We'd like to express our sincere gratitude to all the delegates for their active participation. We are also grateful to the conference committees for their precious efforts. It is through the collective efforts that made the conference such a success.

We're certain you will find the city of Nice to be most pleasant, and it will be our distinct pleasure to welcome each of you to the ICCSM & ICEDL.

Warm Regards,
ICCSM & ICEDL 2026 Conference Committees

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Youssef Abou-Msallem, CESI, Campus de Nice, France
Yuya Ieiri, Waseda University, Japan

ONSITE GUIDELINES

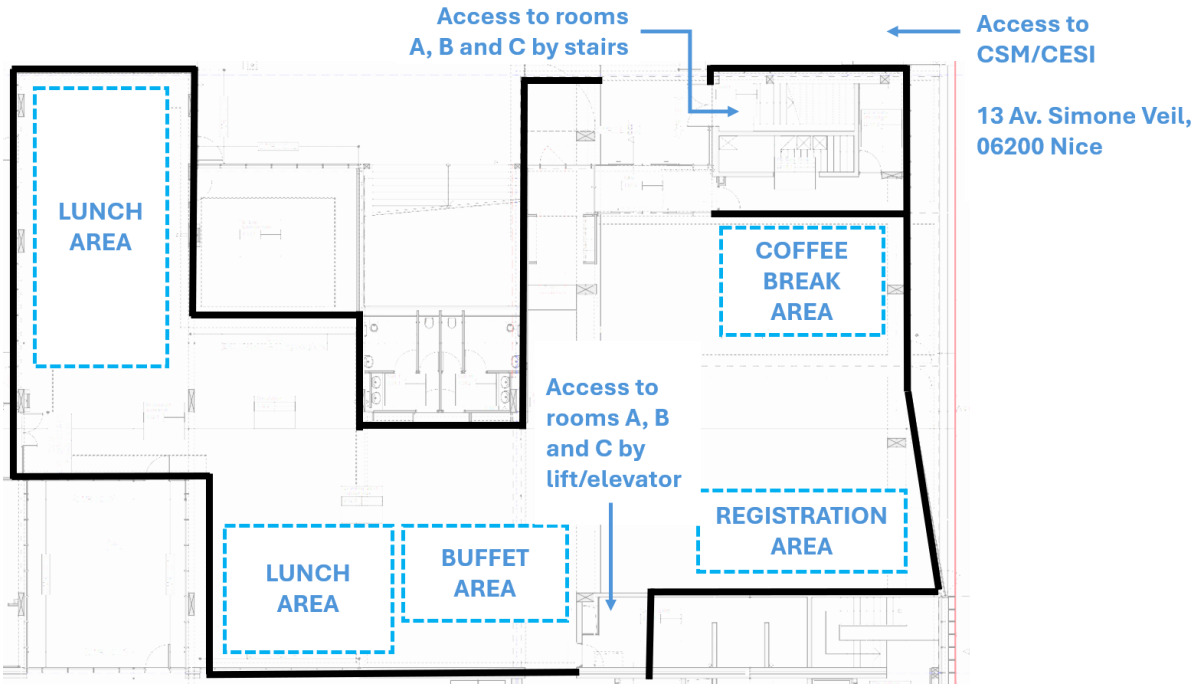
Onsite Conference Venue

CESI Nice

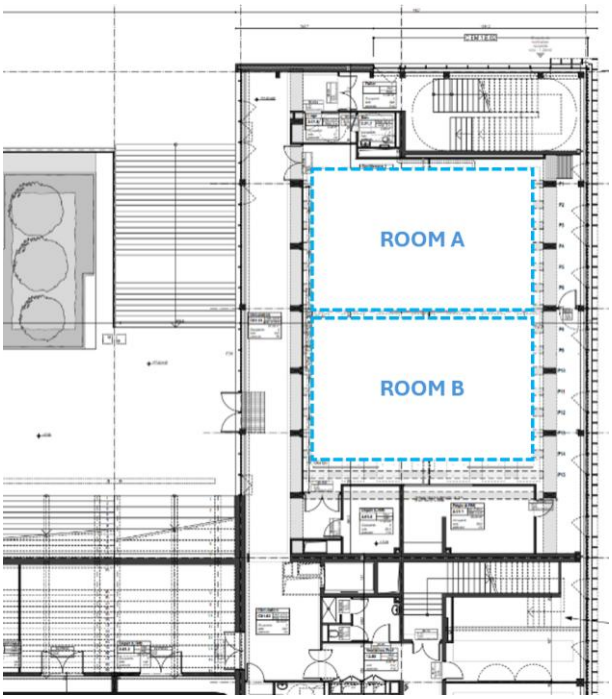
Address: 13 Avenue Simone Veil, 06200 Nice

Website: https://nice.cesi.fr

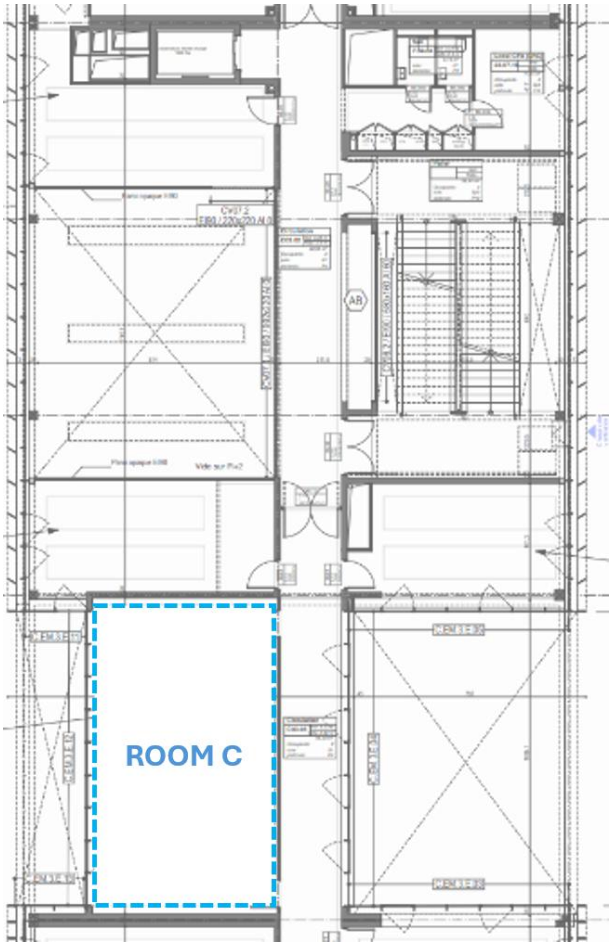
Ground Floor



First Floor



Third Floor



Onsite Conference Room

Lobby of CESI (GF)	Registration & Materials Collection
Room A (1F)	Keynote Speeches & Invited Speeches & Onsite Author Sessions
Room B (1F)	Invited Speeches & Onsite Author Sessions
Room C (3F)	Invited Speeches & Onsite Author Sessions

Onsite Presentation

- Official language is **English**.
- Each one has **15 minutes (including Q&A)**. Each presentation should be at least 10 minutes.
- A **16:9** slide format is recommended.
- Authors are reminded to bring their presentation files on **a USB flash drive** and upload them to the conference laptop 10-15 minutes before session starts.
- Each session room will be equipped with a projector, screen, point device, microphone, and a laptop with general presentation software such as Microsoft Power Point and Adobe Reader.

Gentle Reminder

- Please keep all your belongings (laptop and camera, etc.) at any time. The conference organizer does not assume any responsibility for the loss of personal belongings.
- Please wear your **NAME TAG** during the conference activities. Lending it to others is not allowed.
- Accommodation is not provided. Delegates are suggested to make early reservations.

ONLINE GUIDELINES

Time Zone

Nice, France Time (UTC/GMT+2)

You're suggested to set up the time on your computer in advance.

Online Platform

Download link: https://zoom.us/download

Sign In and Join

- Join a meeting without signing in:
  A Zoom account is not required if you join a meeting as a participant, but you cannot change the virtual background or edit the profile picture.
- Sign in with a Zoom account:
  All the functions are available.

Presentation Process by Zoom Meeting

- **Step 1:** Turn on the camera and open slides
- **Step 2:** Brief self-introduction
- **Step 3:** Share screen
- **Step 4:** Q&A time, unmute yourself

Online Presentation

- Official language is **English**.
- Each one has **15 minutes (including Q&A)**. Each presentation should be at least 10 minutes.
- A **16:9** slide format is recommended.
- Presenters should join the meeting room 10-15 minutes before session starts.
- The certificates will be sent after the conference by email.

Environment & Equipment Needed

- A quiet place; Proper lighting and background; Stable Internet connection
- A computer with internet and camera; Earphone

AGENDA OVERVIEW

Day 1, July 3, 2026, Friday, (UTC/GMT+2)

Online Participants Only	*Zoom Test*
10:00-12:00	Meeting ID: 834 2778 8721 Link: https://us02web.zoom.us/j/83427788721 Password: 2026

✅ **Name setting before entry!**
Conference Committee/ Speaker: Position-Name
Author: Paper ID-Name

Participants who are going to do online presentations are required to join the ZOOM pre-test.
Duration: 2-3 minutes apiece. Free to leave after your rehearsal is done.

Onsite Participants Only	*Registration & Materials Collection*
14:00-16:00	**Lobby of CESI (GF)**

Please inform the staff of your paper ID and sign your name on the attendance list and check meal information.
Please keep personal belongings safe, the organizer is not responsible for any loss.

AGENDA OVERVIEW

Day 2, July 4, 2026, Saturday, (UTC/GMT+2)

Hybrid Style	***Keynote Speeches***	
	Room A (1F); Meeting ID: 834 2778 8721 (Link); PWD: 2026	
	Host: Prof. Smain Femmam, UHA University France, France	
08:50-08:55	Opening Remarks	Prof. Smain Femmam, UHA University France, France
08:55-09:00	Welcome Speech	Prof. Youssef Abou-Msallem, CESI, Campus de Nice, France
09:00-09:30	Keynote Speech I	**Prof. Stefano Secci, Conservatoire National des Arts et Métiers (Cnam), France** Speech Title: The Life of a Token: from Words to Bits on the Wire
09:30-10:00	Keynote Speech II	**Prof. Giuseppe Ritella, University of Campania "Luigi Vanvitelli", Italy** Speech Title: Learning at the Boundary: Digital Tools as Enablers of Boundary Crossing in Education
10:00-10:20	Coffee Break	
10:20-10:50	Keynote Speech III **Online**	**Prof. Merouane Debbah, Khalifa University, United Arab Emirates** Speech Title: The Network That Thinks: From Infrastructure to Intelligence
10:50-11:20	Keynote Speech IV	**Prof. Samir Ouchani, CESI LINEACT, France** Speech Title: Towards Trustworthy and Resilient Federated Learning Systems
11:20-11:50	Keynote Speech V	**Prof. Vania Conan, Conservatoire National des Arts et Métiers, France** Speech Title: Future Digital Infrastructures: What Place for Sovereignty
11:50-12:00	Group Photo	
12:00-13:30	Lunch Time | **Lobby of CESI (GF)**	

Onsite Only	***Invited Speeches & Author Sessions***		
	Room A (1F)	Room B (1F)	Room C (3F)
13:30-13:50	Invited Speech I: **Assoc. Prof. Yuya Ieiri, Waseda University, Japan** Speech Title: Community Computing: Understanding, Modeling, and Designing Human-Centered Societies	Invited Speech II: **Prof. Amirouche. Farid, University of Illinois Chicago, USA** Speech Title: Understanding Orthopaedic Biomechanics: How Science Helps Us Improve Surgery	Invited Speech III: **Prof. Jean Max Tavares, Pontifical Catholic University of Minas Gerais, Brazil** Speech Title: COIL as a Low-Cost Strategy for Internationalizing Higher Education in Emerging Economies
13:50-15:50	**Special Session** Community Interaction Dynamics: Human, Social-Psychological, and Robotic Perspectives NCE147, NCE163, NCE135, NCE347-A, NCE157, NCE152, NCE149, NCE138	**Onsite Session 1** Machine Learning Theory and Data Computing Models NCE124, NCE128, NCE121-A, NCE126-A, NCE109, NCE130, NCE101, NCE127-A	**Onsite Session 2** Education Simulation and Learning Experience Based on Virtual Technology NCE501, NCE333-A, NCE310, NCE343, NCE105, NCE340-A, NCE303
15:50-16:10	Coffee Break		

Onsite Only	*Invited Speeches & Author Sessions*		
	Room A (1F)	Room B (1F)	Room C (3F)
16:10-16:30	Invited Speech IV: **Dr. Mahdi Madani, Université Bourgogne Europe, France** Speech Title: Enhancing Data Security through AI and Chaos Theory	Invited Speech V: **Dr. Alex Pak Ki Kwok, The Chinese University of Hong Kong, Hong Kong, China** Speech Title: Trust, Risk, and Technology Acceptance in Higher Education	
16:30-18:15	**Onsite Session 3** AI Driven Learning Mode and Digital Health System NCE102, NCE316-A, NCE315, NCE108, NCE146, NCE324-A, NCE125	**Onsite Session 4** Teacher Professional Development and Teaching Quality Evaluation NCE309-A, NCE313, NCE312, NCE334-A, NCE331, NCE318, NCE335	**Onsite Session 5** Cloud-based Privacy Protection and Information Security NCE150, NCE113, NCE131, NCE142, NCE132, NCE114
18:30	Dinner Time | **MOXY Hotel (500 meters from CESI)** **Handover Ceremony for ICCSM & ICEDL 2027**		

AGENDA OVERVIEW

Day 3, July 5, 2026, Sunday, (UTC/GMT+2)

Full Virtual	*Invited Speeches & Author Sessions*	
	Meeting ID: 834 2778 8721 (Link); PWD: 2026	
10:00-10:20	Invited Speech VI	**Dr. Paulo Batista, University of Évora, Portugal** Speech Title: Responsible Research in and for an Information Science Revolution
10:20-10:40	Invited Speech VII	**Assoc. Prof. Maria Concetta Carruba, Pegaso University, Italy** Speech Title: Reimagining Inclusion: How Artificial Intelligence is Shaping the Future of Education
10:40-11:00	Break Time	
11:00-11:20	Invited Speech VIII	**Prof. Nianyin Zeng, Xiamen University, China** Speech Title: Handling Dynamic Behaviors in Environments via the Evolutionary Transfer Optimization Technique
11:20-13:00	Lunch Break	
13:00-15:00	Online Session 1	**Topic: Machine Learning Driven Information Security and Intelligent Networks** NCE203, NCE155, NCE164, NCE112, NCE151, NCE137, NCE205, NCE357
15:00-15:15	Break Time	
15:15-17:30	Online Session 2	**Topic: AI Empowered Information Education and Intelligent Learning System** NCE159, NCE206, NCE322, NCE355, NCE160, NCE506, CE352, NCE354, NCE502

CONFERENCE GENERAL CHAIR

Prof. Dr. Smain Femmam
UHA University France, France

Prof. Dr. Smain FEMMAM is Director of research at the University of Haute-Alsace France and responsible of the Research team on Signals & Safety Systems of Polytechnic Engineers School Paris France.

He received the MS and Ph.D. degrees in Signal Processing and Computers from Versailles University, France in 1997 and 1999 respectively. Since 2013 he is promoted to a rank of senior director of research (HDR) (Professor of universities and engineering schools). After that, he joined the CMU Carnegie Mellon University & West Virginia University as Postdoc Fellow and Distinguished Visiting Professor.

His main research area is signal processing, safety systems, communication and embedded systems. He has a strong interest in perception and characterization of signals, optimal filtering, spectral analysis, wavelets and perception haptics.

Dr. Femmam is a fellow member of IETI, senior member of IEEE, SEE and GDR ISIS. Member of IEEE C.A. committee France section. Board of Director of the Institute for Engineering and Technology Innovations in the World. He has guided numerous thesis projects, including some doctoral theses. He is active reviewer for several scientific academic journals and committee member of international conferences. He is the (Academic, Chief) Editor-in-Chief, Editor, Editorial Board, Guest Editor & Advisory Board members of more than 40 International Journals. He has authored and co-authored more than 150 papers, four Chapters, three edited Books, ten Books published by Wiley, Springer & Elsevier

CONFERENCE GENERAL CO-CHAIR

Prof. Samia Nefti-Meziani
University of Birmingham, UK

Professor Nefti-Meziani is an international leading expert with 25 years of experience in AI and robotics. She has recently been awarded an Order of the British Empire for her services to Robotics and featured as the 2020's top 30 world's women in robotics you need to know about by Silicon Valley Robohub, the largest scientific community in robotics.

She is the former Vice Chairman of IEEE Robotics and Automation UK & RI, Co-director of the EPSRC National Hub in Robotics and Future AI for Space Technology (FAIR-SPACE) and Associate Editor of IEEE Transactions on Fuzzy Systems and she is serving as an Advisory board member for the RGP, the Asian council and the EPSRC centre for innovative manufacturing and intelligent Automation. She is also a member of the Physical Sciences Research Council (EPSRC) Peer Review College and reviewer for UKRI, Finland research funding agency and EC.

Chaired by DSIT, she is currently the lead on the UK Cross-Industry RAS Development Task Force initiative, funded by EPSRC, which aims at shaping the policies and initiatives for the UK's effort to develop a world-leading market and innovation environment for exploiting advancements in RAS. This task force involves Industry influencers, many national infrastructure organizations, including DFT, DEFRA, NHS, UK Space Agency, Lower Thames Crossing, Sellafield Ltd, Network Rail, National Highways and many others from the UK- Cross Industry RAS Development Task Force Network.

KEYNOTE SPEECH I

Prof. Stefano Secci
Conservatoire National des Arts et Métiers (Cnam), France

09:00-09:30, July 4, 2026, Room A (1F)

Speech Title: The Life of a Token: from Words to Bits on the Wire

This talk will demystify the way we go from Generative Ai interactive chat to actual traffic across Processing Units clusters, for both training and inference workloads, possibly involving multiple agents. It will overview challenges and existing approaches in transformer chain performance modeling and control, request routing to distributed agents, hyperparamenter sizing, showcasing some preliminary experimental results from an academic distributed LLM testbed.

Biography:

Professor and researcher specializing in communication networks, with expertise spanning routing, switching, virtualization, cloud networking, and advanced network protocols. He is currently leading and participating in multiple European and national research projects on 5G/6G, AI, edge computing, and network resilience, and has held roles as principal investigator, coordinator, and committee member on numerous initiatives. Prof. Secci teaches advanced courses at Cnam Paris and has served as the director of its Computer Science Department, contributing to several graduate programmes on computer networks and IoT systems.

KEYNOTE SPEECH II

Prof. Giuseppe Ritella
University of Campania "Luigi Vanvitelli", Italy

09:30-10:00, July 4, 2026, Room A (1F)

Speech Title: Learning at the Boundary: Digital Tools as Enablers of Boundary Crossing in Education

This speech, grounded in socio-cultural and dialogic perspectives on learning, asks what kinds of transformative learning processes can be enabled by a theoretically grounded and empirically validated adoption of educational technology. Drawing on more than a decade of theoretical-methodological work and empirical studies on technology-mediated educational environments and digital game-based learning, this keynote offers an original synthesis of research on space-time relations in learning, boundary crossing, and digital gamified learning, arguing that these perspectives illuminate a set of principles and conditions for transformative digital education. First, it discusses how the adoption of technology entails a deep transformation in the space-time relations of learning that goes far beyond the common "learn anywhere, anytime" slogan often associated with distance education, and examines the implications of this transformation for the design and implementation of technology-mediated learning. Second, it shows how learning can move beyond the boundaries that institutions draw around it. Examining how learners can cross social, cultural, disciplinary, and contextual borders (for example between school and life, formal and informal learning, and physical and virtual environments) allows to shed light on some conditions under which technology-mediated and distance education can generate genuine transformative processes. Third, it concludes with preliminary empirical evidence from a recent comparative research project showing that game elements alone seem insufficient to enhance motivation or engagement in digital learning, and highlights how deliberate, theoretically grounded design is crucial for enabling meaningful educational experiences. Together, these insights converge on the claim that the potential of digital and distance education depends (to some degree) on how educational technology developers, instructional designers, educators, and learners co-construct and negotiate the boundaries, space-time configurations, and social relations that can make technology-mediated learning genuinely meaningful.

Biography:

Giuseppe Ritella is an Associate Professor of Developmental and Educational Psychology at the University of Campania "Luigi Vanvitelli". His research, grounded in dialogic and socio-cultural theories, investigates collaborative processes within technology-mediated learning. He focuses on the socio-material, emotional, and cultural dimensions of innovative educational practices and hybrid learning environments.

KEYNOTE SPEECH III

Prof. Merouane Debbah
Khalifa University, United Arab Emirates
(Online)

10:20-10:50, July 4, 2026, Meeting ID: 834 2778 8721 (Link); PWD: 2026

Speech Title: The Network That Thinks: From Infrastructure to Intelligence

As we move toward 6G, networks are evolving from passive data pipelines to intelligent, adaptive systems. This keynote introduces the concept of cognitive infrastructure networks that sense, reason, and act autonomously. We explore AI-native architectures capable of self-optimization, failure prediction, and context-aware adaptation. Technologies like TelecomGPT and digital twins demonstrate early realizations of this paradigm. We present practical use cases and discuss implications for standards and ethics. This shift redefines connectivity itself, moving from speed to situational intelligence at the edge of infrastructure.

Biography:

Mérouane Debbah is a researcher, educator and technology entrepreneur. Over his career, he has founded several public and industrial research centers, start-ups and is now Professor at Khalifa University of Science and Technology in Abu Dhabi and founding Senior Director of the Digital Future Institute. He is a frequent keynote speaker at international events in the field of telecommunication and AI. His research has been lying at the interface of fundamental mathematics, algorithms, statistics, information and communication sciences with a special focus on random matrix theory and learning algorithms. In the Communication field, he has been at the heart of the development of small cells (4G), Massive MIMO (5G) and Large Intelligent Surfaces (6G) technologies. In the AI field, he is known for his work on Large Language Models, distributed AI systems for networks and semantic communications. He received multiple prestigious distinctions, prizes and best paper awards (more than 50 IEEE best paper awards) for his contributions to both fields and according to research.com is ranked as the best scientist in France in the field of Electronics and Electrical Engineering. He is an IEEE Fellow, a WWRF Fellow, a Eurasip Fellow, an AAIA Fellow, an Institut Louis Bachelier Fellow, an AIIA Fellow and a Membre émérite SEE. He was named in 2025 as one of the "50 Leaders at the Forefront of an AI-Driven Future in the Middle East" and "Arab's Most Influential Leaders in Tech".

KEYNOTE SPEECH IV

Prof. Samir Ouchani
CESI LINEACT, France

10:50-11:20, July 4, 2026, Room A (1F)

Speech Title: Towards Trustworthy and Resilient Federated Learning Systems

Federated Learning (FL) enables privacy-preserving collaborative training across heterogeneous, distributed devices—yet this openness simultaneously expands the attack surface to Byzantine participants, gradient poisoning, inference attacks, and aggregation subversion. Achieving genuine trustworthiness and resilience in such environments requires rigorous engineering of the entire FL pipeline, not merely algorithmic tuning.
This seminar advances an engineering-centric perspective on secure FL, arguing that federation must be treated as a controlled software component embedded within explicit threat models, architectural boundaries, and runtime supervision mechanisms. Three interdependent pillars structure the talk:

▶ Robustness. Byzantine-resilient and poisoning-aware aggregation; hybrid multi-level similarity frameworks; optimised detection placement in Hierarchical FL (HFL) architectures that bound adversarial impact at every tier of the federation.
▶ Privacy & Confidentiality. Differential privacy, secure aggregation, and anomaly-driven client selection that jointly minimise information leakage and neutralise free-rider behaviour without sacrificing model utility.
▶ Explainability & Accountability. Runtime monitors and XAI-grounded supervision that render federation decisions, gradient updates, and detected anomalies traceable and interpretable—turning FL from a black box into an auditable system.

Tools and case studies in HFL security, smart healthcare, and cyber-physical systems illustrate how these pillars co-operate at design time and at runtime, enabling FL deployments to tolerate faults, adversarial participants, and distributional shifts without loss of trust. The seminar concludes with a research vision toward Trustworthy Federated AI Engineering—where resilience, security, and explainability are first-class, systematically verified engineering properties rather than afterthoughts.

Biography:

Samir Ouchani is Research Director at CESI LINEACT (Aix-en-Provence, France), expert in cybersecurity, and federated/collaborative AI. He holds a PhD from Concordia University (Canada, 2013), an HDR from CNAM Paris (2022), and has been nationally qualified as Professor of Universities (CNU Section 27) since 2023. His research record is both prolific and impactful: more than 100 peer-reviewed publications in premier venues; contributions that have directly shaped the field—resilient FL architectures, robust aggregation and client-selection mechanisms, runtime supervision for distributed AI, and AI-assisted engineering for autonomous system remediation. He has directed seven PhD theses, coordinated more than fifteen research and industrial projects, and serves recurrently as Program or Track Chair at international conferences and as an expert evaluator for major funding agencies. These roles reflect sustained, internationally recognised scientific leadership—not merely participation, but the active structuring of a research community. His work does not describe trustworthy AI: it builds the methods, architectures, and standards that make it real.

KEYNOTE SPEECH V

Prof. Vania Conan
Conservatoire National des Arts et Métiers, Paris, France

11:20-11:50, July 4, 2026, Room A (1F)

Speech Title: Future Digital Infrastructures: What Place for Sovereignty

Issues of digital sovereignty have received renewed interest in the current context with the increasingly influential role of GAFAM and with the increase in international tensions, particularly in Europe. Regulations have been put in place to protect the personal data of Europeans (GDPR), regulate the development of AI algorithms (AI Act), and structure the field of IT services (Digital Services Act). The aim of the presentation is to look at what role the question of sovereignty plays in the developments of the underlying digital infrastructure, communications networks and computing centres. We will review the developments of the Internet, 6G, and the cloud in order to identify links between technical developments, scientific innovations, and sovereignty issues.

Biography:

Vania Conan is professor at CNAM (Conservatoire National des Arts et Métiers, Paris, France) chair 'sovereign digital infrastructures'. He graduated from Ecole des Mines de Paris (Engineer 1990, PhD in computer science, 1996) and is HDR in networking (Sorbonne Université, 2012). At Thales until 2024, he develops a research activity on wireless communications (ad-hoc networks, 6G), software networks and secure infrastructures.

INVITED SPEECH I

Assoc. Prof. Yuya Ieiri
Waseda University, Japan

13:30-13:50, July 4, 2026, Room A (1F)

Speech Title: Community Computing: Understanding, Modeling, and Designing Human-Centered Societies

Communities are complex systems formed through interactions among people, places, and local resources. Understanding how such communities function and evolve is important for addressing challenges related to regional sustainability, economic vitality, and social well-being. However, community dynamics cannot be fully explained from a single disciplinary perspective. Their analysis requires the integration of knowledge from computer science, network science, social sciences, and regional studies. This talk presents recent research on community computing through case studies conducted in commercial districts and local communities. First, behavioral data collected from large-scale stamp rally events are analyzed to reveal patterns of customer movements and relationships among stores. Network-based approaches are employed to uncover hidden structures of human activities and interactions within communities. The talk then introduces a framework for the dynamic analysis of social capital. By representing social relationships as evolving networks, it becomes possible to investigate how trust, communication, and social connections change over time and influence community development. These studies demonstrate how computational approaches can provide new insights into community structures and dynamics that are difficult to capture through conventional methods alone. Through these examples, the presentation highlights the importance of integrating diverse forms of knowledge, including quantitative behavioral data, social relationships, and field-based observations. The talk discusses how such interdisciplinary perspectives contribute to a deeper understanding of communities and support the design of more vibrant, sustainable, and human-centered societies.

Biography:

Yuya Ieiri is an Associate Professor at the Graduate School of Information, Production, and Systems, Waseda University, Japan, and a researcher in the Japan Science and Technology Agency (JST) PRESTO program. He received his Doctor of Engineering degree from Waseda University in 2021. Before his current appointment, he was a Research Fellow of the Japan Society for the Promotion of Science (JSPS) and a Visiting Research Fellow at the School of Hospitality & Tourism Management, University of Surrey, United Kingdom. His research interests include artificial intelligence, human-computer interaction, social system engineering, augmented reality, tourism informatics, social informatics, and information design. He actively conducts field-based studies focusing on shopping streets and tourist destinations. He is a member of the Information Processing Society of Japan (IPSJ), the Institute of Electronics, Information and Communication Engineers (IEICE), the Society of Instrument and Control Engineers (SICE), and the Institute of Electrical and Electronics Engineers (IEEE).

INVITED SPEECH II

Prof. Amirouche. Farid
University of Illinois Chicago, USA

13:30-13:50, July 4, 2026, Room B (1F)

Speech Title: Understanding Orthopaedic Biomechanics: How Science Helps Us Improve Surgery

Biomechanics has become an essential foundation of modern orthopedic surgery, fundamentally transforming how clinicians understand various pathologies, develop targeted interventions, and assess patient outcomes across multiple subspecialties, including those focused on the hand, shoulder, and elbow; the spine, hip, and knee; and the foot and ankle. Traditionally rooted in cadaveric experimentation and mechanical testing, this field has transitioned into a dynamic, multidisciplinary arena that seamlessly blends engineering principles, advanced computational In Silico modeling, and clinical insights on surgical outcomes to enhance patients' quality of life and boost overall productivity.

This presentation delves into the remarkable evolution of orthopedic biomechanics, tracing its journey from conventional experimental models and a limited understanding of the musculoskeletal system to contemporary methodologies that facilitate both quantitative analysis and predictive clinical insights. A wide array of advanced tools—such as motion analysis, gait assessment, finite element modeling, sophisticated imaging techniques, and high-fidelity cadaveric simulations equipped with sensors—have profoundly enriched our comprehension of the intricate nature of joint kinematics, load distribution across structures, and the interactions between implants and surrounding tissues. These innovations have led to a transformative shift in implant design, surgical techniques, and rehabilitation strategies, all aimed at significantly improving patient outcomes.

In recent years, cutting-edge technologies such as robotics, computer navigation, mixed reality, and augmented reality have further expanded the boundaries of biomechanics. These advancements enable real-time diagnostics and detailed surgical pre-planning by focusing on specific outcome measures.

Looking ahead, personalized care emerges as the cornerstone of future orthopedic practices, with artificial intelligence poised to play a pivotal role in biomechanics. This includes enhancing our understanding of bone and soft-tissue injuries, degenerative processes, implant wear, and the intricate balance of human joints. A variety of innovative applications in orthopedic biomechanics will be showcased, highlighting the exciting potential that lies ahead in this rapidly evolving field.

Biography:

Dr. Amirouche is currently a Professor and Director of Orthopaedic research at the University of Illinois at Chicago. He is the Director of Biomechanics at the Northshore University Systems, Orthopaedic Research Institute affiliate of the University of Chicago. He is also a senior research scientist at Jesse Brown Veterans Hospital, Chicago, IL. A graduate of University of Cincinnati where he received his BS, MS, and Doctorate degree in Engineering Science Aerospace, and mechanical engineering with focus on Biomechanics.

He served as a professor of Mechanical ad Bioengineering at UIC. He worked closely Dr. Gunnar Anderson in the department of Orthopaedics at Rush Presbyterian Hospital; Dr. Amirouche joined the Department of Orthopedics at UIC in 1998. He received the prestigious award of Scholar Professor at University of Illinois in December 2005 and served as the Director of Orthopaedics Research since 2006 where he served as full professor of Orthopaedics and Director of orthopaedic research.

Dr. Amirouche has developed a broad experience in orthopaedic biomechanics and related areas where he works on innovative new solutions and their realization, from concept phase to market readiness. His particular research interests are in the areas of knees/hips, spine biomechanics, biological tissues, the bone/implant interface, kinematics/kinetics of human joints, experimental and finite element analysis used to characterize the mechanical behavior of biological tissues and reconstructive devices for orthopedics.

INVITED SPEECH III

Prof. Jean Max Tavares
Pontifical Catholic University of Minas Gerais, Brazil

13:30-13:50, July 4, 2026, Room C (3F)

Speech Title: COIL as a Low-Cost Strategy for Internationalizing Higher Education in Emerging Economies

Internationalization has become a strategic priority for higher education institutions worldwide. However, traditional internationalization models based on physical mobility often reach only a small proportion of students, particularly in emerging economies where financial constraints, language barriers, and limited institutional resources restrict access to international experiences. This presentation discusses Collaborative Online International Learning (COIL) as a low-cost and scalable alternative for promoting internationalization at home.

The presentation introduces the COIL methodology, originally developed by the State University of New York (SUNY), and examines how collaborative online projects can connect students and faculty from different countries without requiring international travel. Particular attention is given to the potential of COIL to expand access to global learning opportunities, foster intercultural competencies, strengthen digital skills, and promote international collaboration among students from diverse socioeconomic backgrounds.

The presentation also explores the main challenges associated with COIL implementation, including differences in time zones, language proficiency, technological infrastructure, and pedagogical coordination. In addition, the role of artificial intelligence in supporting international collaboration will be discussed, highlighting both opportunities, such as translation and communication support, and challenges related to academic integrity and ethical use.

The central argument is that COIL represents an effective, inclusive, and sustainable strategy for internationalizing higher education institutions, especially in emerging economies, where expanding international experiences to a larger number of students remains a critical challenge.

Biography:

Jean Max Tavares is a Professor at the Pontifical Catholic University of Minas Gerais, Brazil, where he has taught Economics, Finance, and Investments for 25 years. Of these 25 years, 20 were also dedicated to teaching in distance education programs, in addition to in-person courses, during which he developed numerous analog and digital teaching materials for university students. He holds a Ph.D. in Economics and completed postdoctoral research in Tourism Economics. His academic work includes 40 scientific publications and the book Game Theory Applied to Tourism, published in the United States. Professor Tavares has been a Visiting Professor at the University of South Florida (USA) and a Visiting Scholar at Panthéon-Sorbonne University (France). He has received 27 scientific and academic awards and has presented research at international conferences in the United States, France, Portugal, China, Ukraine, Georgia, Bulgaria, Spain, Malta, and the Czech Republic.

INVITED SPEECH IV

Dr. Mahdi Madani
Université Bourgogne Europe, France

16:10-16:30, July 4, 2026, Room A (1F)

Speech Title: Enhancing Data Security through AI and Chaos Theory

Today, digital data permeates every aspect of our personal and professional interactions. However, this ubiquity creates a growing risk of sophisticated cryptanalysis attacks designed to compromise sensitive personal information. While traditional cryptography has been a primary defense for decades, the advent of AI-based adversarial techniques has significantly lowered the vulnerability threshold of once-robust cryptographic algorithms. This evolution necessitates a paradigm shift in how we secure information. Our research proposes a new defense framework that integrates the unpredictability of chaotic systems with the adaptive power of artificial intelligence. By leveraging the initial condition sensitivity inherent in chaos theory and the pattern recognition capabilities of AI models, we have developed a hybrid protection technique capable of withstanding advanced cyber threats. The synergy of these three domains: AI, chaos theory, and cryptography constitutes a formidable barrier against intrusions. The experimental results presented in this study demonstrate that this integrated approach offers a superior level of security, guaranteeing data integrity and confidentiality in an increasingly hostile digital environment.

Biography:

Mahdi Madani is actually an Associate Professor at the department of Computer Science, Electronics and Mechanics, Université Bourgogne Europe. He received his Ph.D. in Electronics Systems from the University of Lorraine on July 2018. He was a temporary research and teaching associate at IUT Auxerre, University of Burgundy, from September 2018 to August 2020, and he was also a temporary researcher at IETR laboratory and teaching associate at IUT Nantes from September 2020 to August 2022. In September 2022, he joined the CORES team in the IMVA UR 7535, laboratory for the Associate Professor and Researcher position. His research interest is information security in new digital networks, algorithm-architecture suitability, FPGA, and SoC implementation of complex algorithms, applying security techniques (confidentiality, integrity, encryption, chaotic systems, etc.) to image, signal, and vision applications, and exploring artificial intelligence packages for data and privacy preserving in embedded applications.

INVITED SPEECH V

Dr. Alex Pak Ki Kwok
The Chinese University of Hong Kong, Hong Kong, China

16:10-16:30, July 4, 2026, Room B (1F)

Speech Title: Trust, Risk, and Technology Acceptance in Higher Education

Digital technologies are now part of almost every aspect of university life. Students use learning management systems, institutional applications, online services, and increasingly AI-powered tools to support their learning and daily academic activities. While universities often focus on encouraging technology adoption, questions of trust and risk are becoming equally important. How do students respond when they have concerns about privacy, security, or digital deception?

This invited presentation examines the relationships among trust, risk perception, and technology acceptance in higher education. Drawing on recent research with university students in Hong Kong, China, the presentation explores how students evaluate the benefits and risks of educational technologies and how these perceptions are related to their willingness to use digital services. Particular attention will be given to institutional digital platforms, privacy concerns, cybersecurity awareness, and the implications of emerging technologies such as AI for digital trust in educational settings.

The presentation will discuss why continued technology use does not always indicate trust and what this means for universities seeking to create effective and sustainable digital learning environments. Implications for educators, researchers, and university leaders will also be considered.

Biography:

Alex Pak Ki Kwok is a Lecturer teaching in the Data Science and Policy Studies Programme at The Chinese University of Hong Kong. He earned his PhD from The University of Hong Kong and has over seven years of university teaching experience, with a focus on applied data science and business analytics.

His research examines technology adoption and the use of emerging digital tools in education and everyday life. He has studied how virtual reality and AI meeting assistants may support learning effectiveness and teaching practice. His work also explores social commerce, telehealth acceptance, and data driven decision making.

He has published in journals including Internet Research, Educational Research Review, Computers & Industrial Engineering, Decision Support Systems, and International Journal of Information and Education Technology.

His recent projects examine public perceptions of generative AI, the use of AI tools in English medium university lectures, and digital inclusion among older adults in Hong Kong, China. His work aims to better understand how digital innovation may shape learning, well-being, and social inclusion.

INVITED SPEECH VI

Dr. Paulo Batista
University of Évora, Portugal

10:00-10:20, July 5, 2026, Meeting ID: 834 2778 8721 (Link); PWD: 2026

Speech Title: Responsible Research in and for an Information Science Revolution

Following the Second World War an explosion in the quantity of documentation led to a dramatic change in Archiving, or the profession referred to as records managers/records management and archivists/archives. Starting in the 1980s, however, archivists in Quebec began to make great progress by changing their approach and looking at the entire documentary cycle from current to definitive information. Carol Couture and Jean- Yves Rousseau made a crucial contribution towards the understanding of the Three Age Theory that viewed Archiving as an integrated discipline centered on a structural understanding of archives. In 1994, their work Les Fondements de la Discipline Archivistique, presented a new interpretation of Theodore Schellenberg's Three Age Theory. They called attention to the fact that the three phases of archival documents are not separate but, on the contrary, integrated. They argued that these three stages can even be looked at in a segmented way, provided the union between them is ensured. Their great innovation relative to Schellenberg's work lay, precisely, in critiquing the division and separation between the three ages of archival documents. Couture and Rousseau thereby brought together all the phases of the lifecycle of records, from production to dissemination, in opposition to the sterile distinction advocated by traditional archivists and document managers. In my opinion, however, the best approach to integrating information management is known as records continuum, which place archives in a post-custodial, informational, and scientific paradigm. This Australian concept arose in the 1990s amid the huge explosion of information, communication technologies and new media. This context forced Information Science to redefine its object of study. Records continuum is closely related to the integrated management model of Couture and Rousseau, while it carries their innovation further, perfecting it and replacing it with systemic dynamics and providing continuity between archives. In fact, records continuum means, literally, continuous management. It looks at the whole process from the production of records to their final archiving. Otherwise, we cannot speak of continuous management. That is why, when we speak of rigid archives – current, intermediate, and definitive, this approach is more theoretical than practical. There is, in fact, no separation between these phases, even less so from the point of view of the value of documents. The traditional distinction between information with probative and historical value ceases to exist. The information is simultaneous and is, in fact, the same.

Biography:

Current director of the Arquivo Nacional Torre do Tombo, he was senior technician positions at the Instituto de Arquivos Nacionais/Torre do Tombo, Instituto Português do Património Cultural and the Instituto Português do Património Arquitetónico. He has also worked as researcher at the Instituto de Investigação Científica Tropical – Centro de Estudos de História e Cartografia Antiga, and as professor at the MS program in Information Science and Documentation at Universidade NOVA de Lisboa (UNL). Paulo Batista is PhD Researcher at CIDEHUS.UÉ-Interdisciplinary Center for History, Cultures and Societies of the University of Évora, Portugal, where is the coordinator of the research group 2: Heritage and Literacies, and professor at the Autonomous University of Lisbon, where is coordinator and professor of the Postgraduate in Promotion and Cultural and Educational Dynamization of Archives and Libraries, and the Postgraduate in Architectural Archives. (More)

INVITED SPEECH VII

Assoc. Prof. Maria Concetta Carruba
Pegaso University, Italy

10:20-10:40, July 5, 2026, Meeting ID: 834 2778 8721 (Link); PWD: 2026

Speech Title: Reimagining Inclusion: How Artificial Intelligence is Shaping the Future of Education

Education systems worldwide face a structural imperative: neurodivergent learners — estimated at 15–20% of the global school population — continue to be underserved by both traditional pedagogical design and, increasingly, by AI systems that replicate rather than redress existing inequalities. This contribution reimagines inclusion not as an adaptive accommodation, but as a foundational principle capable of reshaping educational futures through the thoughtful integration of Artificial Intelligence. Drawing on the concept of compossibility (Carruba, 2024) and on recent systematic reviews in AI and education (Chiu et al., 2023; Crompton & Burke, 2023), a synergistic framework is advanced articulating four interdependent lenses — Universal Design for Learning, the International Classification of Functioning, Instructional Differentiation, and AI — and examines how their integration can move inclusion from individual exception to systemic design. Concrete evidence is presented across six categories of high-impact AI technologies, from adaptive learning platforms and text-to-speech tools to Extended Reality environments and executive function scaffolds, with specific attention to the vocational education and employment transition. The ethical stakes of this reimagining are addressed directly: algorithmic bias, the inverted digital divide, children's data rights, and the risks of anthropomorphisation demand governance frameworks grounded in both deontological and consequentialist traditions. Crucially, the argument is advanced that AI must amplify — never replace — the distinctly human capabilities of critical thinking, relational intelligence, creativity, and agency that inclusive education ultimately seeks to cultivate. The paper closes with a call for an expanded conception of AI literacy that encompasses democratic, societal, and geopolitical dimensions, guided by the principle that has long anchored disability rights advocacy: Nothing about us without us.

Biography:

Maria Concetta Carruba is Associate Professor at Pegaso University (Italy), specializing in Special Education, Inclusion, and Technologies for Inclusive Education. She earned her PhD in Education in co-supervision with the University of Pittsburgh, focusing on accessibility and educational technology for students with special educational needs. Her research addresses inclusive education, Universal Design for Learning, artificial intelligence, immersive technologies, teacher professional development, and digital innovation. Her work aims to foster accessibility, educational equity, and the development of inclusive learning environments through technology-enhanced pedagogies.

INVITED SPEECH VIII

Prof. Nianyin Zeng
Xiamen University, China

11:00-11:20, July 5, 2026, Meeting ID: 834 2778 8721 (Link); PWD: 2026

Speech Title: Handling Dynamic Behaviors in Environments via the Evolutionary Transfer Optimization Technique

Developing evolutionary transfer optimization (ETO)-based methods has become a novel trend in solving the dynamic multi-objective optimization problems, which dedicate to fully using the history searching experiences so as to accelerate the convergence in new environment. However, those ETO-based methods always suffer the challenge of negative transfer, and to overcome this issue, a hierarchical response system and a multi-strategy adaptive selection mechanism have been proposed, which alleviate the negative transfer from the aspects of "when to transfer" and "how to transfer", respectively. In particular, the former quantifies the environmental changes to make response, and the latter introduces the kernel mean matching method to match the data distribution so as to promote effective knowledge transfer. This report will give in-depth discussions on the motivation and effectiveness of the proposed methodologies, which inspires more thoughts on how to overcome the bottleneck of negative transfer.

Biography:

Nianyin Zeng was born in Fujian Province, China, in 1986. He received the B.Eng. degree in electrical engineering and automation in 2008 and the Ph. D. degree in electrical engineering in 2013, both from Fuzhou University. From October 2012 to March 2013, he was a RA in the Department of Electrical and Electronic Engineering, the University of Hong Kong. From September 2017 to August 2018, he as an ISEF Fellow founded by the Korea Foundation for Advance Studies and also a Visiting Professor at the Korea Advance Institute of Science and Technology.

Currently, he is a Professor with the Department of Instrumental & Electrical Engineering of Xiamen University. His current research interests include intelligent data analysis, artificial intelligence and applications. He has authored or co-authored more than 100 publications with total citations >14,000 according to Google Scholar. His work has been recognized through the reception of numerous awards, including the Highly Cited Researcher in the field of Cross-Field in 2023. Prof. Zeng is currently serving as Subject EiC or AEs for Neurocomputing, Expert Systems with Applicaitons, IET Electronics Letters, and Evolutionary Intelligence.

ONSITE SPECIAL SESSION

Topic: Community Interaction Dynamics: Human, Social-Psychological, and Robotic Perspectives
Chair: Dr. Aya Toyoshima, Shimane University, Japan
Chair: Dr. Takahisa Uchida, Osaka University, Japan

13:50-15:50
July 4, 2026, Saturday
Room A (1F)

For each presenter, please copy your presentation PPT to the conference laptop before the session starts, and stay onsite for the whole session.

NCE147 **13:50-14:05**	Toward Modeling Robot-Mediated Community Perception Through Conversational Interaction Yuya Ieiri, Takahisa Uchida, Aya Toyoshima, Yuichiro Yoshikawa and Hiroshi Ishiguro **Presenter: Yuya Ieiri, Waseda University, Japan**
NCE163 **14:05-14:20**	Comparative Study of First Order and Super-Twisting Sliding Mode Control for Mobile Robot Trajectory Tracking MOHAMED WAJIH AWLED EL HAJ, Neila Mezghani Ben Romdhane, Karim Dahech, Amine Abadi, Toufik Bakir, Mohamed Chaabane and Smain Femman **Presenter: Amine ABADI, Laboratoire ImVia - ESIREM - Université de Bourgogne, France**
NCE135 **14:20-14:35**	Openness-Centered Personality Adaptation in Large Language Model-Based Dialogue Agents Using Social Simulation and Reinforcement Learning Yoshinori Ibe, Takahisa Uchida and Hiroshi Ishiguro **Presenter: Yoshinori Ibe, The University of Osaka, Japan**
NCE347-A **14:35-14:50**	Learning to respect a partner at a distance: Outcomes and engagement patterns from a 14-day self-guided mobile programme for couples Júlia Halamová **Presenter: Júlia Halamová, Comenius University in Bratislava, Slovensko**
NCE157 **14:50-15:05**	Statistical Modeling of Behavioral Response Dynamics to Social Stimuli Aya Toyoshima **Presenter: Aya Toyoshima, Shimane University, Japan**
NCE152 **15:05-15:20**	Culturally Adaptive Human–AI Collaboration Systems: Designing Inclusive Technologies For Diverse Global Communities Nina Abdul Razzak **Presenter: Nina Abdul Razzak, American University of Bahrain, Bahrain**
NCE149 **15:20-15:35**	A Disentangled Consumer Behavior Analytic Model for Commercial District Ecosystem using N-VAEE Framework Zayar Min Maung, Osamu Yoshie and Ieiri Yuya **Presenter: Zayar Min Maung, Waseda University, Japan**
NCE138 **15:35-15:50**	Estimation of Social Relationships within a Community Based on an Infinite Relational Model and Optimization of a Dialogue Robot's Internal State Takumi Ise, Takahisa Uchida and Hiroshi Ishiguro **Presenter: Ise Takumi, The University of Osaka, Japan**

ONSITE SESSION 1

Topic: Machine Learning Theory and Data Computing Models Chair: Assoc. Prof. Łukasz Grabowski, Lublin University of Technology, Poland	13:50-15:50 July 4, 2026, Saturday Room B (1F)

For each presenter, please copy your presentation PPT to the conference laptop before the session starts, and stay onsite for the whole session.

NCE124 **13:50-14:05**	Multi-Output LSTM Modeling for Building Energy and Indoor Comfort Prediction Kokouvi EDOH, Smain Femmam and Selma Boumerdassi **Presenter: Kokouvi Edoh, CNAM Paris, France**
NCE128 **14:05-14:20**	Parametric Study of Computational Efficiency and Accuracy in FDS Vegetation Fire–Conductor Interaction Modeling Peter Weisenpacher, Jan Glasa and Lukas Valasek **Presenter: Peter Weisenpacher, Slovak Academy of Sciences, Slovensko**
NCE121-A **14:20-14:35**	Prediction of UAV energy consumption in long-range flight using neural networks Łukasz Grabowski, Jan Pytka, Grzegorz Kupaj and Szymon Kupaj **Presenter: Łukasz Grabowski, Lublin University of Technology, Poland**
NCE126-A **14:35-14:50**	Conflict-Aware Meta-Fuzzy Forecast Combination Using FCM and Kernel FCM Ozge Cagcag Yolcu and Utku Saadettin Koç **Presenter: Ozge Cagcag Yolcu, Marmara University, Turkey**
NCE109 **14:50-15:05**	A Model and Data Hybrid Driven Discrete Event Simulation Modeling Method Based on Particle Filter Zhi Zhu, Mingxuan Li, Boquan Zhang, Ziran Guo and Tian Jing **Presenter: Mingxuan Li, National University of Defense Technology, China**
NCE130 **15:05-15:20**	Fair Real Estate Price Prediction Using Machine Learning Approaches Saad Al-Ahmadi **Presenter: Saad Al-Ahmadi, King Saud University, Saudi Arabia**
NCE101 **15:20-15:35**	AI-Driven Integration of Satellite Meteorology and Smart-Building Data for Demand-Side Management in Arid Climates Ameni Boumaiza **Presenter: Ameni Boumaiza, Hamad Bin Khalifa University-QEERI, Qatar**
NCE127-A **15:35-15:50**	AI-Based Neutrosophic Recurrent Forecasting via Cascade-Forward Neural Network Experts Ufuk Yolcu, Sumeyye Polater and Ozge Cagcag Yolcu **Presenter: Ufuk Yolcu, Marmara University, Turkey**

ONSITE SESSION 2

Topic: Education Simulation and Learning Experience Based On Virtual Technology Chair: Assoc. Prof. Gianluca Lax, University of Reggio Calabria, Italy	13:50-15:35 July 4, 2026, Saturday Room C (3F)

For each presenter, please copy your presentation PPT to the conference laptop before the session starts, and stay onsite for the whole session.

NCE501 **13:50-14:05**	A Descriptive and Exploratory Study of an Augmented Reality Educational Product for Active Learning Welberth S. Ferreira, Iury T. D. Botelho, Elyzabelle. P. C. Vasconcelos, Keyne. C. M. Silva, Antonio. N. L. Silva and Suelen R. B. Ferreira **Presenter: WELBERTH S FERREIRA, State University of Maranhão, Brazil**
NCE333-A **14:05-14:20**	Externally driven learning: how ai monitoring recongigureslearning motivaiton and produce a performmance-experince divergence in human-ai collaborative classrooms Fangfang Liu, Yue Li, Kun FU and Yi Ding **Presenter: Kun FU, Beijing Normal-Hong Kong Baptist University, China**
NCE310 **14:20-14:35**	How User Interaction Satisfaction Shapes Success in ERP Simulation Games Sung J. Shim **Presenter: Sung J. Shim, Seton Hall University, United States**
NCE343 **14:35-14:50**	What Do Data Science Programs Teach? A Module-Level Comparative Analysis of Curricula in Hong Kong and London Pak Hei Wong and Alex Pak Ki Kwok **Presenter: Alex Pak Ki Kwok, The Chinese University of Hong Kong, Hong Kong, China**
NCE105 **14:50-15:05**	Dependency and Critical Trust in AI-Generated Content: A Comparative Study of University Students in Canada and Egypt Mohamed Mady, Said Baadel and Yousra Allam **Presenter: Said Baadel, Mount Royal University, Canada**
NCE340-A **15:05-15:20**	Learning, Capital, and Social Stratification in Virtual Worlds: A Computational Field Theory of MMORPG Environments Lu Feng and Yi Ding **Presenter: Yi Ding, Beijing Normal-Hong Kong Baptist University, China**
NCE303 **15:20-15:35**	The Influence of Social Adaptation on the Learning Motivation of Papuan Students in the UPH Dormitory Samuel Lukas, David H. Hareva, Irene A. Lazarusli, Abed Nego Joko Sutrisno, Ayu Agustina Sibuea and Desy Rina S. Ghedy **Presenter: Samuel Lukas, Universitas Pelita Harapan, Indonesia**

ONSITE SESSION 3

Topic: AI Driven Learning Mode and Digital Health System Chair: Prof. Jean Max Tavares, Pontifical Catholic University of Minas Gerais, Brazil	16:30-18:15 July 4, 2026, Saturday Room A (1F)

For each presenter, please copy your presentation PPT to the conference laptop before the session starts, and stay onsite for the whole session.

NCE102 **16:30-16:45**	Toward Responsible AI Adoption in Sub-Saharan Africa Healthcare Systems: A Multi-Domain eReadiness Review Malaadh Baadel, Said Baadel, Mohamed Mady and Faith-Michael Uzoka **Presenter: Malaadh Baadel, Mount Royal University, Canada**
NCE316-A **16:45-17:00**	Catering the Needs of Students with Specific Learning Difficulties in the Universities of Hong Kong Tina Wong **Presenter: Tina Wong, The Hong Kong Polytechnic University, Hong Kong, China**
NCE315 **17:00-17:15**	The Merrier the More: The Interplay of Boredom, Engagement, and Gender on Math Achievement Natalia and Samuel Lukas **Presenter: Natalia, Universitas Pelita Harapan, Indonesia**
NCE108 **17:15-17:30**	A Multi-turn Dialogue Sentiment Classification Method Enhanced by BERT Model and LLM Xiaobin Zhu, Zhi Zhu, Anjia Lei, Tianyi Zhou, Ziyi Chen and Tao Wang **Presenter: Xiaobin Zhu, National University of Defense Technology, China**
NCE146 **17:30-17:45**	CDDPM-SE: Improving Sleep Disorder Classification via Conditional Diffusion with Squeeze-Excitation Duc Thien Pham and Roman Mouček **Presenter: Duc Thien Pham, University of West Bohemia in Pilsen, Czechia**
NCE324-A **17:45-18:00**	The 'Cyber Sudy Compantion' Phenomenon: A parasocial Interaction Perspective on Accopaniment Mechanisms and Behavioral Consequences in Online Learning Fangfang Liu, Yue Li, Kun FU and Yi Ding **Presenter: Fangfang Liu, Beijing Normal-Hong Kong Baptist University, China**
NCE125 **18:00-18:15**	Machine Learning for Febrile Typhoid Risk Stratification Using Integrated Bio-Environmental and Socioeconomic Data Said Baadel, Jeremiah Obi, Ekerette Attai, Kingsley Attai, Nnette Ekpenyong and Faith-Michael Uzoka **Presenter: Said Baadel, Mount Royal University, Canada**

ONSITE SESSION 4

Topic: Teacher Professional Development and Teaching Quality Evaluation Chair: Dr. Thomas N. Jambor, Leibniz University Hannover, Germany	16:30-18:15 July 4, 2026, Saturday Room B (1F)

For each presenter, please copy your presentation PPT to the conference laptop before the session starts, and stay onsite for the whole session.

NCE309-A **16:30-16:45**	Exploring the Use of Generative AI in English Medium Instruction (EMI) Contexts: Perceptions and Experiences of Teachers Chiu-hui Wu **Presenter: Chiu-hui Wu, Wenzao Ursuline University of Languages, Taiwan**
NCE313 **16:45-17:00**	Optimizing Teacher Training: Challenges and Innovations in Germany's Vocational Education for Electrical Engineering Thomas N. Jambor **Presenter: Thomas N. Jambor, Leibniz University Hannover, Germany**
NCE312 **17:00-17:15**	A Scale Validation Study of University Students' Career Adaptation and Development in Esports Digital Learning Ecology Tsai-Yu Chen, Huei-Mei Wei, Hsueh-Chih Lin and Lung-Hsing Kuo **Presenter: Tsai-Yu Chen, SHU-TE University, Taiwan**
NCE334-A **17:15-17:30**	Data-Driven Discipline and Motivational Reconfiguration in Humna-Ai Collaborate Classsrooms: A Process-Based and SEM analyis of Ai-orchestrated Leanring Yue Li and Fangfang Liu **Presenter: Yu Lie, Beijing Normal-Hong Kong Baptist University, China**
NCE331 **17:30-17:45**	Evaluating User Satisfaction and Behavioral Patterns in Teacher Professional Development Platforms: A Mixed-Methods Data Mining Approach Hsueh-Chih Lin, Huei-Mei Wei, Tsai-Yu Chen and Lung-Hsing Kuo **Presenter: Hsueh-Chih Lin, National Kaohsiung Normal University, Taiwan**
NCE318 **17:45-18:00**	Contribution of Pedagogical Competence, Work Motivation, and Work Engagement to the Teaching Effectiveness of Industry Practitioners Sesilia Fajar Handayani and Samuel Lukas **Presenter: Sesilia Fajar Handayani, ESMOD Jakarta, Indonesia**
NCE335 **18:00-18:15**	Determinants of Junior High School Teachers' Professional Development: A Generalized Linear Model Analysis Hsueh-Chih Lin, Huei-Mei Wei, Tsai-Yu Chen, Lung-Hsing Kuo and Pei-Wen Li **Presenter: Hsueh-Chih Lin, National Kaohsiung Normal University, Taiwan**

ONSITE SESSION 5

Topic: Cloud-based Privacy Protection and Information Security Chair: Assoc. Prof. Sung J. Shim, Seton Hall University, United States	16:30-18:00 July 4, 2026, Saturday Room C (3F)

For each presenter, please copy your presentation PPT to the conference laptop before the session starts, and stay onsite for the whole session.

NCE150 **16:30-16:45**	A Threshold-Based Auditing Mechanism for Privacy-Compliant Competitions Gianluca Lax and Lucia Della Spina **Presenter: Gianluca Lax, University of Reggio Calabria, Italy**
NCE113 **16:45-17:00**	Two-Stage On-Core Scheduling under Multi-Level Cache Capacity and Contiguous Allocation Constraints Boquan Zhang, Yicheng Xu, Huahua Ding, Zhi Zhu, Ziyi Chen and Tian Jing **Presenter: Boquan Zhang and Ziyi Chen, National University of Defense Technology, China**
NCE131 **17:00-17:15**	A Fully Trained Neural Network Surrogate of the AES128 Encryption Mohamed EL HASSANI, Mahdi MADANI and El-Bay Bourennane **Presenter: Mohamed El Hassani, Université de Bourgogne Europe, France**
NCE142 **17:15-17:30**	Robust Phishing Email Detection using Dual-view Supervised Contrastive Learning: A Comparative Study Xueying Wang, Zhiwei Fu and Steven H. H. Ding **Presenter: Zhiwei Fu, McGill University, Canada** **Presenter: Xueying Wang, University of Ottawa, Canada**
NCE132 **17:30-17:45**	Hybrid CNN-Guided Recurrent Reinforcement Learning Autoscaling for Cloud-Native Big Data Stream Analytics Sevara Alieva, Danish Shehzad and Irfan ud Din **Presenter: Danish Shehzad, New Uzbekistan University, Pakistan**
NCE114 **17:45-18:00**	Construction and Evolution Analysis of a Dynamic Indicator System for Enterprise Digital Transformation Based on Deep Learning Text Mining Xin Zhou, Xiaobo Li, Hua He, Jingjing Li, Zhi Zhu and Tao Wang **Presenter: Xiaobo Li, National University of Defense Technology, China**

ONLINE SESSION 1

Topic: Machine Learning Driven Information Security and Intelligent Networks
Chair: Dr. Sriram Vasudevan, Aumovio Singapore Pte Ltd, Singapore

13:00-15:00
July 5, 2026, Sunday
834 2778 8721 (Link); PWD: 2026

For each presenter, please enter the meeting room 10-15 minutes before session starts, and stay online during the session.

NCE203 **13:00-13:15**	SkyGuard: A Physical Entropy-Based Cryptographic Key Generation System Using Cloud and Atmospheric Dynamics Ayman Aljarbouh, Ahmad Alzayer, Saleh Almohsen, Ali Al Ahmed, Mohammed Bu Obaid, Ibrahim Al-Ghraify and Suleiman Alabdallah **Presenter: Ayman Aljarbouh, Prince Mohammad Bin Fahd University, Saudi Arabia**
NCE155 **13:15-13:30**	State of the Art in Balancing and Control Techniques for Hydraulic Underfloor Heating Systems with Loops Serving Multiple Units Aboudoul-Manaf ISSIFOU, Smain Femmam, Samia Nefti-Meziani and Nadia Femmam **Presenter: Aboudoul-Manaf ISSIFOU, CEDRIC, CNAM, France**
NCE164 **13:30-13:45**	Fault-Tolerant Disjoint Paths in Crossed Cubes with Applications to Robust TSP and Delivery Optimization Aymen Takie Eddine Selmi, Wail Zerarka, Mohamed Faouzi Zerarka, Smain Femmam and Samia Nefti-Meziani, **Presenter: Aymen Takie Eddine Selmi, University of Batna, Algeria**
NCE112 **13:45-14:00**	From Cryptographic Algorithms to Timed Automata: A Formal Verification Approach using UPPAAL Sriram Vasudevan, Michael Kasper, Sheikh Mahbub Habib and Yi Wang **Presenter: Sriram Vasudevan, Aumovio Singapore Pte Ltd, Singapore**
NCE151 **14:00-14:15**	Privacy-Preserving Model Integrity: Hybrid Verification of Cloud Data Integrity using Homomorphic Tokens with Role-Based Access Control Ogechukwu Okonor, Polra Victor Falade, Bismark Tei Asare, Azebaze Guimagang and Obinwa Ozonze **Presenter: Polar Victor, Nigeria Defence Academy, Nigeria**
NCE137 **14:15-14:30**	Privacy-Preserving Location-Based Services in Edge Computing Using Intelligent Resource Allocation Sunitha Safavat, Vinay Megus and Kishan Gugulotu **Presenter: Vinay Megus, University of the Cumberlands, USA**
NCE205 **14:30-14:45**	Ecological Highly Performative and Sustainable Modern Architecture for AI-Based IoT Applications Jesus Alcaraz, Suleiman Alabdallah, Rand Kouatly, Ayman Aljarbouh, Ibrahim Al-Ghraify and Mohammed Nazeh Alimam **Presenter: Suleiman Alabdallah, Prince Mohammad Bin Fahd University, Saudi Arabia**
NCE357 **14:45-15:00**	A Case Study on Governance Challenges and Improvements in University Education Development Foundations Tao Feng and Halimire Aierken **Presenter: Halimire Aierken, Shanghai University of Political Science and Law, China**

ONLINE SESSION 2

Topic: AI Empowered Information Education and Intelligent Learning System
Chair: Assoc. Prof. Maria Concetta Carruba, Pegaso University, Italy

15:15-17:30
July 5, 2026, Sunday
834 2778 8721 (Link); PWD: 2026

For each presenter, please enter the meeting room 10-15 minutes before session starts, and stay online during the session.

NCE159 **15:15-15:30**	Automated Essay Feedback Systems using Multi-Agent Systems:A Novel Architecture for Personalized Writing Assessment Itohowo Effiong Charles, Brain Aboze, Ayobami Aderemi, Amidu Ololade Anthonia, Fatai Faith Alimi and Chidiebere Njoku **Presenter: Itohowo Effiong Charles, Independent Researcher, United Kingdom**
NCE206 **15:30-15:45**	AI-Powered Adaptive Software (PowerTeach) For Enhancing Stem Education: Four Years Of Classroom Implementation Suleiman Alabdallah, Khaled Fawagreh, Izharul Haq, Ayman Aljarbouh and Taha Rajab **Presenter: Suleiman Alabdallah, Prince Mohammad Bin Fahd University, Saudi Arabia**
NCE322 **15:45-16:00**	Based on RF-LSTM: quantification of distance learning engagement and prediction of learning outcomes for part-time postgraduates Tingyu Li **Presenter: Tingyu Li, Shenyang University, China**
NCE355 **16:00-16:15**	A hybrid genetic algorithm and machine learning framework for entrepreneurial success prediction in higher education Abbas Rammal, Dina Sidani, Christ Trad, Mostapha Rizk **Presenter: Abbas Rammal, Universite Saint Joseph de Beyrouth, Lebanon**
NCE160 **16:15-16:30**	Agentic Pipeline for Screen Time Reduction: An Autonomous AI System for Digital Wellbeing Anthonette Chidinma Adanyin, Ayobami Aderemi, Fatai Faith Alimi, Brain Aboze, Chidiebere Njoku and Oluwole Fagbohun **Presenter: Anthonette Chidinma Adanyin, Independent Researcher, United Kingdom**
NCE506 **16:30-16:45**	Innovation and Practice of Ideological and Political Theory Courses in Digital Distance Learning Momo Jiang and Shudi Duan **Presenter: Momo Jiang and Shudi Duan, Henan University of Economics and Law, China**
NCE352 **16:45-17:00**	A Competency-Based Docimological Model for Online Higher Education: Constructive Alignment, Dublin Descriptors, and Scenario-Based Assessment at Pegaso University Maria Concetta Carruba, Elisabetta Lucia De Marco, Anna Dipace and Pierpaolo Limone **Presenter: Maria Concetta Carruba, Pegaso University, Italy**
NCE354 **17:00-17:15**	The SRL Architecture of AI-Mediated Lexical Gains: How Metacognition Modulates Dual-Pathway Processing Pengbiao Zhang, Xinjin Song, Fengjunzi Wang and Yin Zhang **Presenter: Pengbiao Zhang, Hubei Business College, China**
NCE502 **17:15-17:30**	Evolution of Graduate Students' Perceptions, Motivations, Impact and Challenges of AI Tools Danielle Morin, Tanya Giannelia and Sara Hossaini **Presenter: Danielle Morin, Concordia University, Canada**

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