

On site Activities (very preliminary) Program

Conference Hotel

Conference Venue Location

On site Program

NOVOTEL BARCELONA CORNELLÀ

Avenida Maresme 78

08940, Cornellà de Llobregat

BARCELONA

+34 934 74 70 00

H3667@accor.com

Updated as of **Sept 16th, 2026**

The program will be continuously updated.

NexTech 2026: <https://www.iaria.org/conferences2026/NexTech26.html>

&

SoftNet 2026: <https://www.iaria.org/conferences2026/SoftNet26.html>

&

TechWorld: <https://www.iaria.org/conferences2026/TechWorld26.html>

Timezone converter: <https://www.worldtimebuddy.com>

Session conference rooms	Room A (All Plenaries)	Room B
Plenaries	Room A	

Sunday, Sept 27

12:00	Registration starts The registration desk is in front of the conference rooms. It is open for the duration of the conference.
14:15 - 14:30	Welcome Opening Session
14:30 - 15:30	Keynote Speech Theme: From Connectivity to Service-Oriented Networking: Value-of-Service Driven Resource Allocation for Integrated Sensing and Communications Speaker: Prof. Dr. Biwei Li, Southeast University - Nanjing, China Chair: Petre Dini
15:30 - 15:45	Coffee Break
15:45 - 16:45	Keynote Speech

	Theme: Uncovering the Social Role of Everyday Mobility beyond Trip Purpose through AI and Data Analytics Speaker: Prof. Dr. Sc. Ivana Semanjski, Universiteit Gent, Belgium Chair: Biwei Li
16:45 - 17:00	Coffee
17:00 - 18:00	Keynote Speech Theme: Model-Driven Software Engineering: An NST Architecture Speaker: Prof. Dr. Herwig Mannaert, University of Antwerp, Belgium Chair: Ivana Semanjski
18:00- 18:15	Coffee
18:15 - 19:30	Welcome Cocktail

Monday, Sept 28

09:00 - 10:00	Keynote Speech Theme: How can we Assess the Trustworthiness of AI-based Systems? Speaker: Dr. Juliette Mattioli, Thales Group, France Chair: Carlo Simon	
10:00 - 10:15	Coffee Break	
10:15 - 11:45	Session 1	Session 10
11:45 - 12:00	Coffee	
12:00 - 13:00	Open Discussion I Theme: Bridging Human Intelligence and Artificial Intelligence Moderators: Dr. Juliette Mattioli, Thales Group, France Prof. Dr. Sc. Ivana Semanjski, Universiteit Gent, Belgium Prof. Dr. Herwig Mannaert, University of Antwerp, Belgium	
13:00 - 14:15	Lunch on your own	
14:15 - 15:15	Keynote Speech Theme: On to the Next Level! Methodological and Technical Integration of Process Simulation with Artificial Intelligence Speaker: Prof. Dr. Carlo Simon, Hochschule Worms - University of Applied Sciences, Germany Chair: Juliette Mattioli	
15:15 - 15:30	Coffee	
15:30 - 17:00	Session 2	Session 11
17:00 - 17:15	Coffee break	
17:15 – 18:45	Session 3	Session 12
18:45- 19:00	Coffee	
19:00 - 20:30	Panel #1 Theme: Building and Testing AI-supported Systems	

	Moderator Prof. Dr. Carlo Simon, Hochschule Worms - University of Applied Sciences, Germany Panelists Dipl. Ing. Yoann Randon, IRT SYSTEMX, France Prof. Yasutaka Uchida, Teikyo University of Science, Japan Dr. Juliette Mattioli, Thales Group, France Prof. Dr. Joshua Sipper, Air University, Air Command and Staff College, USA
--	--

Tuesday, Sept 29

09:00 - 10:00	Keynote Speech Theme: Critical Design and Performance Considerations for Deep Space Communications Speaker: Timothy T Pham, NASA Deep Space Network (DSN) - Jet Propulsion Laboratory (JPL), USA Chair: Joshua Sipper	
10:00 - 10:15	Coffee Break	
10:15 - 11:45	Session 4	Session 13
11:45 - 12:00	Coffee	
12:00 - 13:00	Keynote Speech Theme: Sculpting Cyber Utopia: Carving Order Out of Chaos Speaker: Prof. Dr. Joshua Sipper, Air University, Air Command and Staff College, USA Chair: Timothy T Pham	
13:00 - 15:00	Lunch on your own	
15:00 - 16:30	Session 5	Session 14
16:30 - 16:45	Coffee break	
16:45 - 18:15	Session 6	Session 15
18:15 - 18:30	Coffee	
18:30 - 20:00	Panel #2 Theme: Trends in Human-Machine Interaction and Coexistence Moderator Prof. Dr. Hans-Werner Sehring, NORDAKADEMIE gAG Hochschule der Wirtschaft, Germany Panelists Prof. Dr. Samer Al-khateeb, Creighton University, USA Prof. Dr. Michael Massoth, Department of Computer Science, Hochschule Darmstadt (h_da) University of Applied Sciences Darmstadt, Germany	

Wednesday, Sept 30

09:00 - 10:00	Keynote Speech Theme: Verifiable Security for Cyber-Physical Systems: Solutions and Challenges Speaker: Prof. Dr. Sibylle Fröschle, TU Hamburg, Germany Chair: Hans-Werner Sehring	
10:00 - 10:15	Coffee Break	
10:15 - 11:45	Session 7	Session 16
11:45 - 12:00	Coffee	
12:00 - 13:00	Keynote Speech Theme: Language Model-Driven Software Engineering: Towards Integrating Natural Language with Formal Models Speaker: Prof. Dr. Hans-Werner Sehring, NORDAKADEMIE gAG Hochschule der Wirtschaft, Germany Chair: Lasse Berntzen	
13:00 - 14:30	Lunch on your own	
14:30 - 16:00	Session 8	Session 17
16:00 - 16:15	Coffee break	
16:15 - 17:45	Session 9	Session 18
17:45 - 18:00	Coffee	
18:00 - 19:00	Keynote Speech Theme: Building Digital Wildfire Resilience: How AI, Drones and Community Resources Can Transform Fire Response Speaker: Prof. Dr. Lasse Berntzen, University of South-Eastern Norway, Norway Chair: Mart Verhoog	
19:15 - 23:00	Conference Dinner Novotel <i>Cornella de Llobregat</i> Hotel	

Thursday, Oct 1

09:00 - 10:00	Keynote Speech Theme: Beyond Technology: Modeling the Human Side of Energy Transition Speaker: Prof. Dr. Mart Verhoog, IU International University of Applied Sciences, Germany Chair: Lasse Berntzen
10:00 - 10:15	Coffee Break
10:15 - 12:00	Panel #3 Theme: Perspectives on Decision-making in Intelligent Systems Moderator Prof. Dr. Lasse Berntzen, University of South-Eastern Norway, Norway Panelists Prof. Dr. Mart Verhoog, IU International University of Applied Sciences,

	Germany Prof. Dr. Saikat Das, Utah Valley University, USA Dr. Majdi Abdellateif, Arab Open University, Saudi Arabia Prof. Dr. Marko Jäntti, University of Eastern Finland, Finland
12:00 - 12:15	Coffee
12:15 - 13:15	Open Discussion II Theme: Challenges and Innovation on AI Competencies Moderators Prof. Dr. Lasse Berntzen, USN, Norway Dr. Andrew Lauziere, Galois, Inc. USA Prof. Dr. Petre Dini, IARIA, USA/EU
13:15 - 13:30	Coffee break
13:30 - 14:30	Session 19
14:30 - 15:00	Closing / Farewell Coffee

Recommended tourist objectives to be visited on your own:

- General information: www.barcelonatourguides.com
- Contact: info@barcelonatourguides.com

Barcelona

Prepare your best places to see in Barcelona: https://youtu.be/XVqpOCPg_Y4

- Park Güell
- Sagrada Familia
- Picasso Museum
- Gaudi Museum
- Museum of Catalan Art
- Montjuic Hill
- La Rambla
- La Marina

Girona

Salvador Dali Museum [one day trip from Barcelona]

REGULAR SESSIONS

Session 1 [EMERGING, HEALTH, CYBER] - Monday morning

Session Chair: Francisco Mahedero Biot

50009 A Proposed Framework for Bridging System Definition and Execution Management through System Architecture

Daniel Crespo, Stevens Institute of Technology, USA

70097 Comparison of Wrist Trajectory Estimation Between MediaPipe and LiDAR-Based Depth Sensing During Upper-Limb Reaching Movements Made by the Upper Limbs

Yasutaka Uchida, Teikyo University of Science, Japan

80040 Cyber Deception-Driven Defense: Hunting Advanced Persistent Threats

Joshua Sipper, Air University, Air Command and Staff College, USA

Session 2 [CYBER, ICSEA] - Monday early afternoon

Session Chair: Joshua Sipper

80072 An Open-Source Adaptive Access Control Framework Based on User Reliability for Corporate and Telecommuting Environments

Francisco Mahedero Biot, Universitat Politècnica de València, Spain

80015 Agile Approach of Cybersecurity System with Low-code Application Platform [PRESENTATION]

KyongRyol Yoon, Hyundai Motors, South Korea

10039 Enhancing Enterprise Information Access in CRM Platforms through Semantic Technologies: A Real Case Study

Angel Luis Garrido, Universitat Politecnica de Valencia / University of Zaragoza, Spain

Session 3 [ICSEA] - Monday afternoon

Session Chair: Angel Luis Garrido

10016 A Method to Extract Developer-independent Information from Data Accounting for Developers' Performance Variability

Gabriele Rotoloni, Università degli Studi dell'Insubria, Italy

10018 Towards a Reference Architecture for AI-Augmented Microservice Systems

Raul Lukacs, Babes Boloy University Cluj-Napoca, Romania

10024 Communication Graph Repositories for Edge-Based Collaborative Applications

Katarina-Glorija Grujić Janković, Faculty of Technical Sciences, Serbia

Session 4 [AISys, INNOV] - Tuesday morning

Session Chair: Aasish Sharma

70007 An Efficient Packet Classification Framework Using Model-Based Selection Scheme and Reinforcement Learning

Yeim-Kuan Chang, National Cheng Kung University, Taiwan

80021 Artificial Intelligence Engineering: Foundations, Methodology, and Emergence of a New Engineering Discipline

Juliette Mattioli, Thales SA, cortAix, France

70003 An Agentic AI-Based Multi-Agent Architecture for Self-Healing DDoS Detection and Mitigation

Saikat Das, Utah Valley University, USA

Session 5 [AISyS, SCALABILITY, UBICOMM] - Tuesday early afternoon

Session Chair: Mathias Gerstner

80023 Trustworthy AI for Safety-Critical Systems: A Paradigm-Agnostic Framework

Juliette Mattioli, Thales SA, cortAix, France

20007 Optimization of Workload Mapping and Scheduling in Scaling Heterogeneous HPC Systems: A Systematic Literature Review

Aasish Sharma, University of Gottingen, Germany

10017 Local-first software to support object sharing in local communities

Andrea Ndreveloarisoa, IRISA, Université Bretagne Sud, France

Session 6 [AISyS, VEHICULAR, ADVCOMP] - Tuesday afternoon

Session Chair: Andrea Ndreveloarisoa

80028 Toward an AI Engineering Body of Knowledge: Inspired by INCOSE's SEBoK and Enhanced with Multi-Agent LLMs

Juliette Mattioli, Thales SA, cortAix, France

30008 Segment-Based Mapping of Mobile Network Connectivity Along Vehicular Routes

Mathias Gerstner, OTH Regensburg, Germany

20015 Performance Analysis of a Containerized WRF Model Across HPC and Cloud Environments

Diogo Gouveia, ARDITI NC 1687, Portugal

Session 7 [ICSEA] – Wednesday morning

Session Chair: Mohammed Abdrrahim Lahmar

10029 Secure Node Registration in Distributed Cloud

Dragana Filipović, University of Novi Sad, Serbia

10043 A Closed-Loop Control Architecture for Reliable Constraint Satisfaction in LLM Text Generation

Shahbaz Siddeeq, Tampere University, Finland

10050 On the Role of Artificial Intelligence in Model-Driven Development: From Textual Requirements to Code Using Formal Models

Radek Koci, Brno University of Technology, Czech Republic

Session 8 [ICSEA] – Wednesday early afternoon

Session Chair: Shahbaz Siddeeq

10053 A Systematic Study on the Integration of AI Components and Software Systems
Mohammed Abdrrahim Lahmar, IMT Atlantique, France

10056 Specification-Based Testing of RESTful APIs
Aira Jain, International Institute of Information Technology, Bangalore, India

10060 Trustworthy RAG: An Evaluation Agent for Detecting Misinformation and Knowledge Poisoning in Generative AI Systems
Md Toufique Hasan, Tampere University, Finland

Session 9 [ICSEA, VALID] - Wednesday afternoon

Session Chair: Md Toufique Hasan

10064 Towards Language Model-Driven Software Engineering
Hans-Werner Sehring, Nordakademie, Germany

10081 Exploring Multi-Level Model-Driven Software Engineering for IoT Edge Devices
Herwig Mannaert, University of Antwerp, Belgium

40006 Challenges in software testing; Testing challenges from the practice
Jos van Rooyen, Huis voor softwarekwaliteit, Nederland

Session 10 [AISyS] - Monday morning

Session Chair: Oghuz Bektash

80017 Analysis of an artificial intelligence based decision support system for public sector project portfolio management
Elisa Perez, USC, Spain

80036 RawToScene: Generating Driving Scenarios from Camera-Only Datasets with Vision-Language Models
Faouzi Adjed, IRT SystemX, France

80007 Developing Multimodal Characterization of YouTube Channels
Nitin, Agarwal, University of Arkansas at Little Rock; ICSI, University of California, Berkeley, USA

Session 11 [EXPLAINABILITY] - Monday early afternoon

Session Chair: Elisa Perez

10007 A Regression Framework for Understanding Prompt Component Impact on LLM Performance
Andrew Lauziere, Galois, Inc., USA

10025 When Accuracy Is Not Enough: Explanation Trustworthiness in AI-Based Flash Flood Prediction

Sara Ourza, University of Luxembourg, Luxembourg

10030 Feature Attribution for Run-to-Failure Degradation: Insights from eXplainable AI

Oghuz Bektash, University of Luxembourg, Luxembourg

Session 12 [SOTICS, WIRELESS] – Monday afternoon

Session Chair: Faouzi Adjed

60020 What Do Mob Images Reveal? A Multimodal Study of Emotions, Sentiments, and Participant Roles in Event-Based Social Media

Samer Al-khateeb, Creighton University, USA

60010 Operationalizing Resource Mobilization Theory Through Socio-Computational Methods: Evidence from Two Capitol Insurrections

Nitin, Agarwal, University of Arkansas at Little Rock; ICSI, University of California, Berkeley, USA

40005 Reasoning Before Sensing: Uncertainty-Aware Resource Allocation for ISAC

Biwei Li, Southeast University, China

Session 13 [SIMUL, SOTICS, ICSEA] - Tuesday morning

Session Chair: Olena Melnykova

50018 AI as an Enabler for Simulation-driven Improvements

Carlo Simon, Hochschule Worms - University of Applied Sciences, Germany

Merlin Hladik, Hochschule Worms - University of Applied Sciences Worms, Germany

60015 A Multi-Context Moral Analysis of Online Toxicity

Nitin, Agarwal, University of Arkansas at Little Rock; ICSI, University of California, Berkeley, USA

10012 The Unified Agentic Vibe Coding Model (UAVCM): A Framework for Closing the Intent-Execution Deficit

Majdi Abdellateif, Arab Open University, Saudi Arabia

Session 14 [CENTRIC, EXPLAINABILITY] - Tuesday early afternoon

Session Chair: Orly Barzilai

30005 Re-establishment of KSP Value Evaluation Index through Context Validation

Taehyun Kim, Hyundai Motor Company, Republic of Korea

30012 From the student struggle of 1848 to the bloody 2029

Joan Verdaguer-Codina, COEIC, Spain

10032 Bringing Transparency to Transplant Ethics: Measuring Ethical Frailty with Explainable AI

Luka Poslon, Catholic University of Croatia, Croatia

Session 15 [DATA ANALYTICS] - Tuesday afternoon

Session Chair: Carlo Simon

60026 GenAI as a Cognitive Scaffold: Navigating the Self-Efficacy vs. Trust Paradox in Visual Dashboard Design

Orly Barzilai, The Academic Colledge of Tel Aviv Yaffo, Israel

60030 Cognitive Biases and Mitigation Strategies in Data Visualization

Olena Melnykova, TU Bergakademie Freiberg, Germany

60055 A Multi-Faceted Textual Analysis of Victorian Studies Scholarship: Quantitative Insights and Thematic Trends in Decades of Academic Discourse

Mahesh Maddumala, Mercyhurst University, USA

Session 16 [CYBER, SEMAPRO, EMERGING] – Wednesday morning

Session Chair: Merlin Hladik

80081 Differential Trust and Security in distributed Systems and Networks – A Model Approach

Hermann Strack, Martin Luther University Halle-Wittenberg, Halle (Saale) , Germany

30014 Performance Evaluation According to Word Frequency of Semi-Supervised Learning in Japanese Word-in-Context

Rimi Yamashita, Ibaraki University, Japan

50013 A Systems-Thinking and Observability View of the Tsetlin Machine

Vojtech Halenka, University in Agder, Norway

Session 17 [CYBER, ICSEA] - Wednesday early afternoon

Session Chair: Guilherme Leitão

80054 A Framework to Quantify the Probability of Future Cyber Loss Events

Siem Peters, Mnemonic, Norway

80069 CSIRT Action Prioritization Based on On-Site Autonomous Response Capability

Hidetoshi Kawai, Graduate Institute for Advanced Studies, SOKENDAI, Japan

10034 A RAG-Enhanced MCP Framework for Reliable Browser and Electron UI Automation

Mehtap Yüceilyas, Aselsan, Turkey

Session 18 [CYBER, CENTRIC] – Wednesday afternoon

Session Chair: Hermann Strack

80074 Feasibility Evaluation for High-Performance Zero Trust Networking
Guilherme Leitão, INESC-ID, Portugal

30027 From Analytical to Knowledge-Oriented Decision Support: Integrating Generative AI into
a Forest Management DSS
Lasse Berntzen, University of South-Eastern Norway, Norway

80061 Beyond Defensive Controls: Emergent Cyber Resilience through Sustainable
Organization in Socio-Technical Security Systems
Michael Massoth, Department of Computer Science, Hochschule Darmstadt (h_da) University of
Applied Sciences Darmstadt, Germany

Session 19 [SIMUL, DATA ANALYTICS, ICSEA] - Thursday
Session Chair: Lasse Berntzen

50021 Machine Learning versus Logistic Regression in Social Network Analysis: A Comparative
Study of Household Refurbishment Decisions
Mart Verhoog, IU International University of Applied Sciences, Germany

60060 Endpoints of Cut Sets and Consistency Index of Fuzzy Reciprocal Matrix
[PRESENTATION]
Shin-ich Ohnishi, Hokkai-Gakuen University, Japan

10020 Towards Sustainable IT Support: A Case Study on Defining Carbon Footprint for Digia
Service Center
Marko Jäntti, University of Eastern Finland, Finland

10084 CodePori: Large-Scale System for Autonomous Software Development Using Multi-
Agent Technology
Zeeshan Rasheed, Tampere University (Pori Campus), Finland

=====