### Onsite Activities (Preliminary) Program

NexTech 2024 & SoftNet 2024

# Conference Hotel Conference Venue Location Conference will be mixed online and on location at

NOVOTEL Venezia Mestre Castellana Via Ceccherini 21 30174 Venezia Mestre Italy

Updated as of September 9, 2024

The program will be continuously updated.

NexTech 2024: https://www.iaria.org/conferences2024/ProgramUBICOMM24.html

SoftNet 2024: <a href="https://www.iaria.org/conferences2024/ProgramICSEA24.html">https://www.iaria.org/conferences2024/ProgramICSEA24.html</a>

Timezone converter: <a href="https://www.worldtimebuddy.com/">https://www.worldtimebuddy.com/</a>

Time slots	Activity
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#### Sunday, Sept 29

12:00 pm	Registration starts
	The registration desk is located in front of the conference rooms.
	The reception is operating during the entire conference.
13:30 - 13:45	Opening session
	Tutorial #1
	Theme: Serious Games for CyberSecurity
13:45 - 14:45	Lecturer
13.43 - 14.43	Dr. Tiago Gasiba, Siemens AG, Munich, Bavaria, Germany
	Chair
	Timothy Haas
14:45 - 15:00	Coffee Break
	Tutorial #2
	Theme: Adapting Cybersecurity Practice to Reduce Wildlife Cybercrime
15:00 - 16:00	Lecturer
13.00 - 10.00	Prof. Dr. Timothy Haas, University of Wisconsin-Milwaukee, USA
	Chair
	Tiago Gasiba
16:00 - 16:15	Coffee
16:15 - 18:00	Session 1 [CENTRIC, CYBER]
18:00 - 18:30	Social Networking
18:30 - 20:00	Welcome Cocktail

## Monday, Sept 30

	Keynote Speech
09:00 - 10:00	Theme: Blockchain and e-commerce
	Speaker
	Prof. Dr. Lassee Berntzen, University of South-Eastern Norway (USN), Norway
	Chair
	Joshua Sipper
10:00 - 10:15	Coffee
10:15- 11:45	Session 2 [SIMUL, VALID]
11:45 - 12:00	Coffee break
12:00 - 13:30	Session 3 [CYBER, AISyS, ICSEA]
13:30 - 15:00	Lunch on your own
15:00 - 16:30	Session 4 [GLOBAL HEALTH]
16:30 - 16:45	Coffee Break
16:45 - 18:15	Session 5 [SIMUL, INNOV, UBICOMM]
18:15 - 18:30	Coffee
	Panel #1
	<b>Theme</b> : Cyber Security Now - Dealing with Autonomous Systems
	Moderator
	Prof. Dr. Erik Buchmann, Leipzig University, Germany
18:30 - 20:15	Panelists
16.30 - 20.13	Prof. Dr. Jirawat Damrianant, Thammasat University, Thailand
	Prof. Dr. Marko Jäntti, University of Eastern Finland, Finland
	Prof. Dr. Lassee Berntzen, University of South-Eastern Norway (USN), Norway
	Dr. Tiago Gasiba, Siemens AG, Munich, Bavaria, Germany
	Prof. Dr. Joshua Sipper, Air University, Air Command and Staff College, USA

## Tuesday, Oct 1

	Keynote Speech
	<b>Theme:</b> AI and the Future of User-Centered Design: Insights from UX Research and
	Evaluation
09:00 - 10:00	Speaker
	Prof. Dr. Stephan Böhm, RheinMain University of Applied Sciences, Germany
	Chair
	Lassee Berntzen
10:00 - 10:15	Coffee
10:15- 11:45	Session 6 [SIMUL, VALID, ICSEA]
11:45 - 12:00	Coffee break
12:00 - 13:30	Session 7 [AISyS, DATA ANALYTICS]
13:30 - 15:00	Lunch on your own
15:00 - 16:30	Session 8 [ICSEA, DATA ANALYTICS]
16:30 - 16:45	Coffee Break
16:45 - 18:15	Session 9 [SEMAPRO, ICSEA, AMBIENT]
18:15 - 18:30	Coffee
	Panel #2
18:30 - 20:15	Theme: Software-Now - Developing, Simulation, and Validation Challenges
	Moderator

Prof. Dr. Hans-Werner Sehring, NORDAKADEMIE gAG, Germany	
Panelists	
Prof. Dr. Simona Vasilache, University of Tsukuba, Japan	
Prof. Dr. Radek Kočí, Brno University of Technology, Czech Republic	
Prof. Dr. Luigi Lavazza, Universita` degli Studi dell'Insubria, Italy	
Prof. Dr. Carlo Simon, Hochschule Worms, Deutschland	
Jos van Rooijen, Huis voor Software Kwaliteit, Nederland	
Dr. Havk Aslanyan CAST RAII Armenia	

## Wednesday, Oct 2

	Keynote Speech Theme: Human-robot Teaming in Zero Visibility Conditions
09:00 - 10:00	Speaker Prof. Dr. Aryya Gangopadhyay, University of Maryland Baltimore County (UMBC),
	USA
	Chair
	Simona Vasilache
10:00 - 10:15	Coffee
10:15- 11:45	Session 10 [CENTRIC]
11:45 - 12:00	Coffee break
12:00 - 13:30	Session 11 [AISyS/AI-HPC]
13:30 - 15:00	Lunch on your own
	Panel #3
	<b>Theme:</b> AI-driven and Human-centric - A (conflicting) <b>Cohabitation</b> Dilemma
	Moderator
	Prof. Dr. Stephan Böhm, RheinMain University of Applied Sciences, Germany
15:00 - 16:30	Panelists
	Prof. Dr. Christelle Scharff, Pace University, USA
	Dr. Antoni Martínez-Ballesté, Universitat Rovira i Virgili, Spain
	Prof. Dr. Jirawat Damrianant, Thammasat University, Thailand
	Prof. Dr. Nader Mir, San Jose State University in California, USA
16:30 - 16:45	Coffee Break
16:45 - 18:15	Session 12 [ADVCOMP/ASDIE]
18:15 - 18:30	Coffee
	Panel #4
	<b>Theme:</b> Artificial Intelligence as Game Changer - A Way to Sustainable Service
	Solutions
	Moderator
	Prof. Dr. Andreas Rausch, Technische Universität Clausthal, Germany
18:30 - 20:15	Panelists
18:30 - 20:13	Dr. Tiago Gasiba, Siemens AG, Munich, Bavaria, Germany
	Dominique Briechle, TU Clausthal, Germany
	Dr. Anne Coull, Flinders University, Sydney, Australia
	Dipl. Ing. Peter Darveau, Centre for Advanced Computing - University of Ottawa,
	Canada
	Sr. Lect. Eric Innocenti, University of Corsica Pasquale Paoli, Corte, France
20:30 - 23:30	Conference Gala Dinner
20.30 - 23.30	Conference Gaia Diffier

#### Thursday, Oct 3

	Keynote Speech
09:00 - 10:00	<b>Theme</b> : A Methodology for Autonomic Monitoring Collection and Forensic Analysis of
	Cloud Systems and Services
	Speaker
	Dr. Juan-Carlos Bennett, Naval Information Warfare Center (NIWC) Pacific, USA
	Chair
	Nader Mir
10:00 - 10:15	Coffee
	Panel #5
	Theme Future Scientific Challenges - Digital Health and User Well-being
	Moderator
10:15- 11:45	Prof. Dr. Joshua Chukwuere, North-West University, South Africa, South Africa
10.13-11.43	Panelists
	Prof. Dr. Erik Buchmann, Leipzig University, Germany
	Dr. Juan-Carlos Bennett, Naval Information Warfare Center (NIWC) Pacific, USA
	Prof. Dr. Yasutaka Uchida, Teikyo University of Science, Japan (日本)
11:45 - 12:00	Coffee break
12:00 - 13:30	Session 13 [GLOBAL HEALTH, UBICOMM, SOTICS, SIMUL]
13:30 - 14:30	Lunch on your own
14:30 - 16:00	Session 14 [EMERGING, AISyS]
16:00 - 16:15	Coffee Break
16:15 - 17:45	Session 15 [ADVCOMP, SIMUL, ICSEA]
17:45 - 18:15	Coffee and Closing Session

#### Recommended tourist objectives to be visited on your own:

*Note:* There is a bus from near-by Novotel Venezia-Mestre Castellana to Piazzale Roma (twice/hour)

An updated public transport timetable is provided by the hotel.

From: Piazzale Roma inside Venice City

(i) via Public Transportation
Grand Canal by public Vaporetto Lines

(ii) by Walking (narrow streets)
Scuola Grande di San Rocco
Frari Church
Rialto Bridge
Food Market of Rialto
Former Financial District of Venice
Fenice Opera House
Church of San Marco
Dodges' Palace
San Marco Belltower
San Marco Piazza

(iii) Recommended

From San Marco Plaza – three islands: Murano, Burano, and Torcello. https://www.venice-museum.com/murano-burano-torcello-islands-venice.php





#### Session 1 [CENTRIC, CYBER] Sun 16:15

Chair: Tiago Gasiba

30023 The Balance Between Surveillance and Privacy - Adjusting to a Changing Threat Landscape Lasse Berntzen, University of South-Eastern Norway, Norway

80027 Poisoning Attack Data Detection with Internal Coefficient Displacement for Machine Learning Based NIDS

Hajime Shimada, Nagoya University, Japan

80038 CAN Message Collision Avoidance Filter For In-Vehicle Networks Uma Vinayak Kulkarni, Hamburg University of Technology (TUHH), Germany

#### Session 2 [SIMUL, VALID] Mon 10:15am

Chair: Uma Vinayak Kulkarni

50025 COSMOS Simulator: A Software Tool for Construction-Process Modelling and Simulation *Jirawat Dominant, Thammasat University, Thailand* 

40010 Exploring and Enhancing Unit Test Generation with EvoSuite: Practical Challenges and Solutions *Josep Silva Galiana, Universitat Politècnica de València, Spain* 

#### Session 3 [CYBER, AISys, ICSEA] Mon 12:00pm

Chair: Josep Silva Galiana

80011 Artificial Intelligence and Semiotics: Using Semiotic Learning to Bolster AI *Joshua Sipper, Air University, Air Command and Staff College, USA* 

80014 ChatSEC: Spicing up Vulnerability Scans with AI for Heterogeneous University IT *Erik Buchmann, Leipzig University, Germany* 

80042 Prepare for the Worst, rather than Hope for the Best: Preparing to Recover from Major Cyber Incidents *Anne Coull, Flinders University, Australia* 

10032 Engineering Robotic Process Automation (RPA) *Marko Jäntti, University of Eastern Finland, Finland* 

#### Session 4 [GLOBAL HEALTH] Mon 15:00

Chair: Erik Buchmann

70016 Constructing a Value Assessment Framework for Early Medtech Innovation Projects at Proof of Concept Centers in China

Fuping Pai, Peiking Union Medical College, China

70024 Evaluation of Segmentation Schemes for Noisy and Denoised Dental Cone Beam Computed Tomography (CBCT) Images

Simin Mirzaei, The University of British Columbia, Canada

70044 A Grounded Theory Study on Developing Competency Models for Technical Managers in Transformation of Medical R&D Findings *Qiufan Sun, Peking Union Medical College, China* 

#### Session 5 [SIMUL, INNOV, UBICOMM] Mon 16:45

Chair: Simin Mirzaei

50007 Weld data collecting for use in welding simulation and digital twins *Martin Gredehall, Blekinge Institute of Technology, Sweden* 

70020 Ambiguity and vagueness of fuzzy number data and fuzzy measure weight for AHP Shin-ichi Ohnishi, Hokkai-Gakuen University, Japan

70005 Reconfigurable Intelligent Surface Assisted MIMO SWIPT System Fang-Biau Ueng, National Chung Hsing University, Taiwan

10005 Leveraging Large Language Models for enhanced personalised user experience in Smart Homes *Jordan Rey-Jouanchicot, Orange, France* 

#### Session 6 [SIMUL, VALID, ICSEA] Tue 10:15am

Chair: Christelle Scharff

50045 Predictive AI To Feed Simulation

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

40002 Industrial report: The Future of Software Testing Brainstorm Session *Jos van Rooyen, Huis voor Software Kwaliteit, The Netherlands* 

10050 The Hidden Hazards of Job Hunting: Third-Party Services on Job Search Websites Sampsa Rauti, University of Turku, Finland

40008 Precise Code Fragment Clone Detection *Hayk Aslanyan, CAST, RAU, Armenia* 

#### Session 7 [AISyS, DATA ANALYTICS] Tue 12:00pm

Chair: Sampsa Rauti

80009 AI Systems Adoption of Unified Research Data Management using oneAPI framework *Peter Darveau, University of Ottawa, Canada* 

80021 Assessing Privacy Policies with AI: Ethical, Legal, and Technical Challenges *Erik Buchmann, Leipzig University, Germany* 

80027 Towards AI-Generated African Textile Patterns with StyleGAN and Stable Diffusion *Christelle Scharff, Pace University, USA* 

60021 Ontology-based Integration of Occupational Health Data: Methods and Case Studies Cassandra Barbey, Department of Pollutant Metrology, INRS, France

#### Session 8 [ICSEA, DATA ANALYTICS] Tue 15:00

Chair: Peter Darveau

10041 Working Together: Class Activities as Cross-Cultural Bridges in Software Engineering Teaching Simona Vasilache, University of Tsukuba, Japan

10053 On the Object-Oriented Petri Nets Model Transformation into Java Programming Language Radek Koci, Brno University of Technology, Czech Republic

10029 A Comparison of Closed-Source and Open-Source Code Static Measures Luigi Lavazza, Universita` degli Studi dell'Insubria, Italy

60025 Evaluation of Property Filtering Algorithms using Tags for a Property Rental Recommendation Application

Brendan Tierney, Technological University Dublin, Ireland

#### Session 9 [SEMAPRO, ICSEA, AMBIENT] Tue 16:45

Chair: Radek Koci

30002 A semantic data model of Harmonized Survey on Households Living Standards *Marc Mfoutou Moukala, Marien Ngouabil University, Congo* 

10048 Building Model-Based Code Generators for Lower Development Costs and Higher Reuse *Hans-Werner Sehring, NORDAKADEMIE, Germany* 

40005 Basic investigation for sign language sentence interpretation using acceleration sensor information *Hiroshi Tanaka, Kanagawa Institute of Technology, Japan* 

40008 Integration of Large Language Models into Control Systems for Shared Appliances *Karl Löwenmark, Luleå University of Technology, Sweden* 

#### Session 10 [CENTRIC] Wed 10:15am

Chair: Hans-Werner Sehring

30004 Enhancing UX Research Activities Using GenAI – Potential Applications and Challenges Stefan Graser, RheinMain University of Applied Sciences, Germany

30009 Construction of the UXAR-CT – a UX Questionnaire for Augmented Reality in Corporate Training Stefan Graser, RheinMain University of Applied Sciences, Germany

30013 User Experience of Augmented Reality: A Comprehensive Systematic Literature Review Stephan Böhm, RheinMain University of Applied Sciences, Germany

#### Session 11 [AISys/AI-HPC] Wed 12:00pm

Chair: Dennis Hoppe

Contributions: To be announced

#### Session 12 [ADVCOMP/ASDIE] Wed 16:45

Chair: Andreas Rausch

Contributions: To be announced

#### Session 13 [GLOBAL HEALTH, UBICOMM, SOTICS, SIMUL] Thu 12:00pm

Chair: Sarah Frank

70035 Detecting Gait Changes with Front-Facing Video and MediaPipe: A Hemiplegic Patient Case Study *Yasutaka Uchida, Teikyo University of Science, Japan* 

10010 Real-Time Emotion Assessment System in Smart Classrooms using Wearable Bracelets Antoni Martínez-Ballesté, Universitat Rovira i Virgili, Spain

60008 A study into the disruption of social media platforms on social gatherings and public places *Joshua Chukwuere, North-West University, South Africa* 

50028 Reusable Building Blocks for Agent-Based Simulations: Towards a Methodology for Composing and Building ABM/LUCC

Eric Innocenti. University of Corsica Pasquale Paoli, Corte, France

#### Session 14 [EMERGING, AISyS] Thu 14:30

Chair: Antoni Martínez-Ballesté

50004 Network Intrusion Detection Using Machine Learning Processes Nader Mir, San Jose State University in California, USA

80025 Combining Templates and Language Models for the Automatic Creation of Scientific Overviews Sarah Frank, CERN, Switzerland & Graz University of Technology, Austria

80034 Fuzzy agent-based simulation of integrated solutions for task allocation and battery charge management for fleets of autonomous industrial vehicles Alain-Jerome Fougeres, ECAM Rennes, France

#### Session 15 [ADVCOMP, SIMUL, ICSEA] Thu 16:45

Chair: Alain-Jerome Fougeres

20013 Comparing Fault-tolerance in Kubernetes and Slurm in HPC Infrastructure Mirac Aydin, Gesellschaft für wissenschaftliche Datenverarbeitung mbH Göttingen (GWDG), Germany Michael Bidollahkhani, Georg-August-Universität Göttingen, Germany

20016 FEM Modeling for PCB Assembly Simulation

Ming-Hsiao Lee, National Center for High-performance Computing, NARL, Taiwan

50038 Metasystem for Modeling Emergency Departments Francisco Mesas Cervilla, Universitat Autonoma de Barcelona, Spain

10043 A Study of Third-Party Tracking on Religious Websites *Panu Puhtila, University of Turku, Finland*