

## On site Activities (*preliminary*) Program

### Conference Hotel

### Conference Venue Location

The conference will be online and on location at  
Holiday Inn Express Valencia-Ciudad Las Ciencias

Escritor Rafael Ferreres 22

Valencia, 46013

Spain

Phone: +34 963 16 25 30

Email: [repcion@expresshivalencia.com](mailto:repcion@expresshivalencia.com)

**Updated as of March 31<sup>st</sup>, 2025.**

**The program will be continuously updated.**

DataSys 2025: <https://www.iaria.org/conferences2025/DataSys25.html>

ComputationWorld 2025: <https://www.iaria.org/conferences2025/ComputationWorld25.html>

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

Time slots	Activity
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### Sunday, April 6

12:30	<b>Registration starts</b> The registration desk is in front of the conference rooms. The registration is operating during the entire conference.
14:15 - 14:30	<b>Opening session</b>
14:30 - 15:30	<b>Tutorial I</b> Secure Software Development for the Cloud <b>Lecturer</b> Prof. Dr. Aspen Olmsted, Wentworth Institute of Technology, USA <b>Chair</b> Mika Helsingius
15:30 - 15:45	<b>Coffee Break</b>
15:45 - 16:15	<b>Special Early Session [SMART]</b>
16:15 - 16:30	<b>Coffee</b>
16:30 - 17:30	<b>Tutorial II</b> Cognitive Sciences and Artificial Intelligence <b>Lecturer</b> Dr. Mika Helsingius, Finnish Defence Research Agency, Finland <b>Chair</b> Aspen Olmsted
17:30 - 17:45	<b>Coffee</b>

17:45 - 18:30	<p style="text-align: center;"><b>Open Discussion I</b> An Anatomy on largeLM, smallLM and tinyLM (the DeepSeek case) <b>Coordinators</b> Prof. Dr. Petre Dini, IARIA, USA/EU Dr. Steve Chan, VTIRL, VT/DE-STE A - Orlando, USA</p>
18:30 - 19:30	<b>Welcome Cocktail</b>

**Monday, April 7**

09:00 - 09:45	<p style="text-align: center;"><b>Keynote Speech</b> Applications of Virtual Reality for Cognitive Training amongst Older Adults <b>Speaker</b> Prof. Dr. Zahra Moussavi, University of Manitoba, Canada <b>Chair</b> Jérôme Dinet</p>	
09:45 - 10:00	<b>Coffee</b>	
10:00 - 11:30	<b>Session 1 [AIVR-3I I]</b>	
11:30 - 11:45	<b>Coffee Break</b>	
11:45 - 12:45	<b>Session 2 [AIVR-3I II]</b>	<b>Session 11 [ICIMP]</b>
12:45 - 13:00	<b>Coffee</b>	
13:00 - 13:45	<p style="text-align: center;"><b>Keynote Speech</b> AI and VR for People with Specific Needs <b>Speaker</b> Prof. Dr. Jérôme Dinet, University of Lorraine, France <b>Chair</b> Zahra Moussavi</p>	
13:45 - 14:45	Lunch on your own	
14:45 - 16:15	<b>Session 3 [xRBCAP I]</b>	<b>Session 12 [PATTERNS, ADAPTIVE, COGNITIVE]</b>
16:15 - 16:30	<b>Break</b>	
16:30 - 17:30	<b>Session 4 [xRBCAP II]</b>	
17:30 - 17:45	<b>Coffee Break</b>	
17:45 - 19:30	<p style="text-align: center;"><b>Panel #1</b> <b>Theme:</b> Advances in VR Systems for Specialized Cognitive Services <b>Moderators</b> Prof. Dr. Zahra Moussavi, University of Manitoba, Canada Prof. Dr. Jérôme Dinet, University of Lorraine, France <b>Panelists</b> Dr. Marius N Varga, University of Plymouth, UK Dr. Aurelie Mailloux, 2LPN, France Dr. Dena Bazazian, University of Plymouth, UK Prof. Dr. Petre Dini, IARIA, USA/EU</p>	

**Tuesday, April 8**

09:00 - 9:45	<b>Keynote Speech</b>
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	<p>The Non-Obvious and Non-Trivial Aspects of Updating a Robust Heuristic for a Real-World Scenario AI-centric System</p> <p><b>Speaker</b> Dr. Steve Chan, VTIRL, VT/DE-STEА - Orlando, USA</p> <p><b>Chair</b> Sebastian Fischer</p>	
09:45 - 10:00	<b>Coffee</b>	
10:00 - 11:30	<b>Session 5 [AICLOUDSEC I]</b>	
11:30 - 11:45	<b>Coffee Break</b>	
11:45 - 12:30	<p><b>Keynote Speech</b> The Persistent Problems with Cybersecurity: A Negative Example and an Outlook on the Cyber Resilience Act</p> <p><b>Speaker</b> Prof. Dr. Sebastian Fischer, Ostbayerische Technische Hochschule Regensburg, Germany</p> <p><b>Chair</b> Steve Chan</p>	
12:30 - 12:45	<b>Coffee</b>	
12:45 - 14:15	<b>Session 6 [AICLOUDSEC II]</b>	<b>Session 13 [SMART, SPWID]</b>
14:15 - 15:15	Lunch on your own	
15:15 - 16:45	<b>Session 7 [AICLOUDSEC III]</b>	<b>Session 14 [SMART]</b>
16:45 - 17:00	<b>Coffee Break</b>	
17:00 - 18:45	<p><b>Panel #2</b> <b>Theme:</b> AI-related Challenges in Security of Cloud Services</p> <p><b>Moderator</b> Prof. Dr. Andreas Aßmuth, Fachhochschule Kiel, Germany</p> <p><b>Panelists</b> Prof. Dr. Christoph P. Neumann, Ostbayerische Technische Hochschule Amberg-Weiden, Germany Dr. Steve Chan, VTIRL, VT/DE-STEА - Orlando, USA Prof. Dr. Malte Prieß, University of Applied Sciences - Kiel, Germany Prof. Dr. Aspen Olmsted, Wentworth Institute of Technology, USA</p>	
18:45 - 19:00	<b>Coffee</b>	
19:00 - 20:00	<p><b>Open Discussion II</b> From Digital Awareness to Digital Literacy</p> <p><b>Coordinator</b> Prof. Dr. Petre Dini, IARIA, USA/EU Prof. Dr. Lasse Berntzen, University of South-Eastern Norway, Norway</p>	
20:30 - 23:30	<p><b>Conference Dinner</b> <b>Restaurante Don Pelayo</b> Junto Ciudad Justicia y Artes y Las Ciencias, Carrer d'Antonio Sacramento, 17, 46013</p>	

### Wednesday, April 9

09:00 - 9:45	<p><b>Keynote Speech</b> AI and Automation: Transforming Municipal Care Services</p> <p><b>Speaker</b> Prof. Dr. Lasse Berntzen, University of South-Eastern Norway, Norway</p> <p><b>Chair</b></p>
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	Jaime Lloret	
09:45 - 10:00	<b>Coffee Break</b>	
10:00 - 11:30	<b>Session 8 [CLOUD, FUTURE COMP]</b>	<b>Session 15 [AIVR]</b>
11:30 - 11:45	<b>Break</b>	
11:45 - 12:30	<b>Keynote Speech</b> Data Analytics: How Can We Get It Right? <b>Speaker</b> Prof. Dr. Joseph G Vella, University of Malta, Malta <b>Chair</b> Lasse Berntzen	
12:30 - 14:00	Lunch on your own	
14:00 - 15:30	<b>Session 9 [BUSTECH]</b>	
15:30 - 15:45	<b>Break</b>	
15:45 - 17:15	<b>Session 10 [FUTURE COMP, CLOUD]</b>	<b>Session 16 [SPWID, IMMM, BUSTECH]</b>
17:15 - 17:30	<b>Coffee Break</b>	
17:30 - 19:15	<b>Panel #3</b> <b>Theme:</b> Challenges in Sensing in Smart Environments <b>Moderator</b> Prof. Dr. Lasse Berntzen, University of South-Eastern Norway, Norway <b>Panelists</b> Dr. Mika Helsingius, Finnish Defence Research Agency, Finland Dr. Roger Tilley, Sandia National Laboratories, USA Prof. Dr. Jaime Lloret Mauri, Universitat Politecnica de Valencia, Spain	

### Thursday, April 10

09:00 - 9:45	<b>Keynote Speech</b> A Metalogic-based Approach to Programming Education <b>Speaker</b> Prof. Dr. Hans-Werner Sehring, NORDAKADEMIE Hochschule der Wirtschaft, Germany <b>Chair</b> Ray Jones	
09:45 - 10:00	<b>Coffee</b>	
10:00 - 11:30	<b>Panel #4</b> <b>Theme:</b> Technology Innovation and Business Management <b>Moderator</b> Dr. Steve Chan, VTIRL, VT/DE-STE A - Orlando, USA <b>Panelists</b> Dr. Viktoriia Apalkova, School of Management Fribourg (HES-SO), Switzerland Prof. Dr. Joseph G Vella, University of Malta, Malta Prof. Dr. Jesper Skjødt, Zealand Sjællands erhvervsakademi, Danmark Prof. Dr. Hans-Werner Sehring, NORDAKADEMIE Hochschule der Wirtschaft, Germany Prof. Dr. Lasse Berntzen, University of South-Eastern Norway, Norway Lektor Sabina Rolsted, Zealand, Denmark	
11:30 - 11:45	<b>Coffee Break</b>	
11:45 - 12:30	<b>Keynote Speech</b> User-centred Design in Robotics and VR <b>Speaker</b>	

	<p>Prof. Dr. Ray Jones, University of Plymouth, UK</p> <p><b>Chair</b></p> <p>Hans-Werner Sehring</p>
12:30 - 12:45	<p><b>Coffee Break</b></p>
12:45 - 13:45	<p><b>Open Discussion III</b></p> <p>Software Engineering in AI Era!</p> <p><b>Coordinators</b></p> <p>Prof. Dr. Petre Dini, IARIA, EU/USA</p> <p>Prof. Dr. Hans-Werner Sehring, NORDAKADEMIE Hochschule der Wirtschaft, Germany</p>
13:45 - 14:45	<p><b>Farewell and Closing Session</b></p>

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

- Cidade das Artes e das Ciências: Arte, Santiago Calatrava, museu, arquitetura, cultura
- Lonja de la Seda: Arquitetura, história, museu, arte, arquitetura gótica
- L'Oceanografic: Aquário
- Valencia Bioparc: Jardim zoológico
- Mercado Central: Mercado
- Torres de Serranos: História
- Catedral de Valência: Catedral, história, arquitetura
- Museu de Belles Arts de València: Museu, arte, cultura, arquitetura
- Institut Valencià d'Art Modern: Arte, museu, arquitetura, cultura



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**Special Early Session [SMART]**

Chair: Petre Dini

40021 Deep Learning-based Failure Detection for Safety Diagnostics of Hydrogen Storage Vessels

Hyo-jin Kim, POSTECH, South Korea

Dongju Kim, POSTECH Institute of Artificial Intelligence, South Korea

**Session 1 [AIVR-3I I]**

Session Chair: Jérôme Dinet

Introduction

Jérôme Dinet, Lorraine University, France

98001 Impact of Background Context on Autistic Children's Recognition of Robot Emotions

Jérôme Dinet, Lorraine University, France

98002 Towards Personalized Mobility Assessment and Rehabilitation: A VR/XR-Based Solution for Older Adults

Yann Morère, University of Lorraine, France

98003 Engagement and Cognitive Effort in Chemistry Education Through Virtual Reality: Examining the Negative Impacts of VR

Jérôme Dinet, Lorraine University, France

## **Session 2 [AIVR-3I II]**

Session Chair: Jérôme Dinet

98004 Enhancing the Utilization of Artificial Intelligence and Social Robots in Specialized Units for Children with Autism

Marie Rychalski, University of Lorraine, France

98005, Ergonomic challenges and benefits of enhanced cultural application with augmented reality for people with autistic spectrum disorder

Armand Manukyan, Association J.B. Thiery and 2LPN, France

Open discussion and Closing remarks

Moderator: Jérôme Dinet

## **Session 3 [xRBCAP I]**

Session Chair: Zahra Moussavi

Introduction

Zahra Moussavi, University of Manitoba, Canada

98006 Designing a naturalistic and interactive VR museum environment with a realistic avatar as a guide for cognitive treatment of the elderly

Amir, Bani Saeed, University of Manitoba, Canada

98007 Non-Immersive Virtual Reality as a Safer Alternative for Cognitive Training in Older Adults: Investigating the Effect of Age on Cybersickness

Rashmita Chatterjee, University of Manitoba, Canada

98008 Acceptability of an AI-Powered Wearable Ring Sensor for Upper Body Mobility in Individuals with Cognitive Impairment: A Pilot Study

Mirella Vera, University of Manitoba, Canada

## **Session 4 [xRBCAP II]**

Session Chair: Zahra Moussavi

98009 Extended Reality (XR) vs. Virtual Reality (VR) for AI-Driven Balance Improvement in Older Adults  
mirella.veras@umanitoba.ca

Mirella Veras, University of Manitoba, Canada

95016 Employing Optical Brain Imaging for Real-Time Assessment of Brain Functions During Immersive Virtual Reality: Harnessing Potential for Neurorehabilitation

Asma Seraj Pour Shooshtari, University of Manitoba, Canada

Open discussion and Closing remarks

Moderator: Zahra Moussavi

## **Session 5 [AICLOUDSEC I]**

Session Chair: Sebastian Fischer

Introduction

Andreas Aßmuth, Fachhochschule Kiel, Germany

Sebastian Fischer, Ostbayerische Technische Hochschule Regensburg, Germany

Christoph P. Neumann, Ostbayerische Technische Hochschule Amberg-Weiden, Germany

28001 Kosmosis: Crypto Rug Pull Detection and Prevention by Fusing On- and Off-Chain Data in a Knowledge Graph

Philipp Stangl, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany

28002 Practical Acoustic Eavesdropping On Typed Passphrases

Darren Fürst, Ostbayerische Technische Hochschule Amberg-Weiden, Germany

28003 Graph Of Effort: Quantifying risk of AI Usage for Vulnerability Assessment

Malte, Prieß, Fachhochschule Kiel, Germany

## **Session 6 [AICLOUDSEC II]**

Session Chair: Andreas Aßmuth

28006 On the Necessity of Measuring Security in IoT

Tobias Eggendorfer, TH Ingolstadt, Germany

28008 A Forensic Analysis of GNSS Spoofing Attacks on Autonomous Vehicles

Mathias Gerstner, OTH Regensburg, Germany

28009 GFDG: A Genetic Fuzzing Method for the Controller Area Network Protocol

Philipp Fuxen, OTH Regensburg, Germany

## **Session 7 [AICLOUDSEC III]**

Session Chair: Christoph P. Neumann

28010 EVSE Intrusion Detection using P2P-distributed Context-Information

Julian Graf, OTH Regensburg, Germany

28011 A Transformer-Based Framework for Anomaly Detection in Multivariate Time Series

Murad Hachani, Murad Hachani, OTH Regensburg, Germany

28012 Theoretical Integration of Hyperledger Fabric in Gaia-X: Towards an Approach for Federated Data Access

Liron Ahmeti, Central Office for Information Technology in the Security Sector (ZITiS), Germany

Open discussion and Closing remarks

Moderators: Andreas Aßmuth, Sebastian Fischer, Christoph P. Neumann

## **Session 8 [CLOUD, FUTURE COMP]**

Session Chair: Maggie Manitta

20010 PERTD – Cloud Application Threat Modeling  
Aspen Olmsted, Wentworth Institute of Technology, Boston, USA

30008 Treatment of the Multi-Attribute Decision-Making Rank Reversal Problem for Real-World Systems  
Steve Chan, VTIRL, VT/DE-STEAM, USA

20052 Configuring Edge Devices That are not Accessible Via the Internet  
Uwe Hohenstein, Siemens AG, Germany

## **Session 9 [BUSTECH]**

Session Chair: Abdulelah Alwabel

90009 Critical success factors for application of Business Intelligence in distribution sector in Denmark  
Sabina Rolsted, Zealand, Denmark  
Jesper Skjoedt, Zealand, Denmark

90011 AURORA: An Automated Database Schema Change Logging System  
Joseph G. Vella, University of Malta, Malta  
Bradley Camilleri, University of Malta, Malta

90015 How does IT governance improve firm performance? A Dynamic Capabilities Perspective  
Maggie Manitta, ESG UQAM, Canada

## **Session 10 [FUTURE COMP, CLOUD]**

Session Chair: Jesper Skjoedt

30014 Fugacity Phase Transition and Hyper-Heuristic Convergence for AI-centric Conceptual Estimating  
Steve Chan, VTIRL, VT/DE-STEAM, USA

20029 Latency-Aware Task Offloading Mechanism for Mobile Edge Computing  
Abdulelah Alwabel, PSAU, Saudi Arabia

30016 Interstitial b-SHAP-centric Amalgam for the Enhancement of an AI-centric Construct Validity Approach  
Steve Chan, VTIRL, VT/DE-STEAM, USA

## **Session 11 [ICIMP]**

Session Chair: Mohammed Fahad Ali

30002 Integrated Cyber Security Risk Management-Insurance and Investment Cost Analysis  
Thomas Lee, University of Illinois at Chicago, USA

30009 Hounterfeit: A Virtual Self-Defending Infrastructure with Transparent Relocation to Honeypots  
Mihai-Alexandru Bogatu, POLITEHNICA Bucuresti, Romania



## **Session 12 [PATTERNS, ADAPTIVE, COGNITIVE]**

Session Chair: Andrea Caroppo

70007 Patterns for Quantum Machine Learning

Lavinia Stiliadou, Institute of Architecture of Application Systems, University of Stuttgart, Germany

50015 Repairing is Caring - An approach to an AI-supported Product-Service-System for Bicycle Lifecycle Prolonging

Mohammed Fahad Ali, ISSE - TU Clausthal, Germany

40007 Developing a Preprocessing Metacognitive System in Machines

Naavya Shetty, University of Illinois Urbana-Champaign, USA

## **Session 13 [SMART, SPWID]**

Session Chair: Giovanni Nardini

40031 On-the-Edge Inference Enabled Vision System for Smart Cities

Carmelo Scribano, INSAIT, Sofia University "St. Kliment Ohridski", Bulgaria

40039 Using Artificial Intelligence to Support Emergency Management Training - Creating Efficient and Realistic Scenarios with ChatGPT

Lasse Berntzen, University of South-Eastern Norway, Norway

80010 Commercial Wrist Devices for Epileptic Seizure Detection: A Systematic Review

Andrea Caroppo, National Research Council of Italy - Institute for Microelectronics and Microsystems, Italy

## **Session 14 [SMART]**

Session Chair: Carmelo Scribano

40008 Smart City Road Maintenance: A LiDAR and AI-Driven Approach for Detecting and Mapping Road Defects

Giovanni Nardini, KeyToBusiness S.R.L., Italy

40014 IoT System for Indoor Air Quality Monitoring Using ThingSpeak: Promoting Healthy Work Environments

Ilber Adonaytr Ruge Ruge, Universidad Pedagógica y Tecnológica de Colombia, Colombia

40034 Enhancing Smart City Sustainability: Anaerobic Treatment of Semiconductor Industry Wastewater for Improved Efficiency and Environmental Impact

Maria Nadais, University of Aveiro, Portugal

## **Session 15 [AIVR]**

Session Chair: Alessandro Leone

95020 Intergenerational Codesign of Immersive Technology for a Heritage Site and Underwater VR Experience

Marius Varga, University of Plymouth, UK

95025 Beyond the Walls: Comparison of Three Extended Reality Technologies Giving Care Home Residents access to Tourism and Cultural Content for Health and Wellbeing  
Ray Jones, University of Plymouth, UK

95033 Enhancing School Visits to Museums Through Gamified Virtual Reality: A Complementary Approach to Learning and Social Engagement  
Cleiton Ferreira, Instituto Federal de Educacao,Ciencia e Tecnologia do Rio Grande do Sul, Brassil

**Session 16 [SPWID, IMMM, BUSTECH]**

Session Chair: Jaime Lloret Mauri

80007 Remote Photoplethysmography System for Vital Signs Estimation: Perceived Usability Evaluation by Age  
Alessandro Leone, National Research Council of Italy - Institute for Microelectronics and Microsystems, Italy  
Anna Maria Carluccio, National Research Council of Italy - Institute for Microelectronics and Microsystems, Italy

50005 An Integrated Data-Driven Approach for Evaluating the Impact of Additional Drill Holes in Mining Exploration  
Jose Gonzalez Ravanal, Dassault Systemes, Chile

90004 How does AI influence the acceptance of business intelligence solutions in Switzerland?  
Viktoriiia Apalkova, School of Management Fribourg (HES-SO), Switzerland

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