Onsite Activities (*Preliminary*) Program

DataSys 2024 & ComputationWorld 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

📞 +39 041 506 6511

🖨 +39 041 940620

✉ H3307@accor.com

Updated as of April 10th, 2024

The program will be continuously updated.

DataSys 2024: **https://www.iaria.org/conferences2024/DataSys24.html**

ComputationWorld 2024: **https://www.iaria.org/conferences2024/ComputationWorld24.html**

Timezone converter: **https://www.worldtimebuddy.com/**

Time slots	Activity

Sunday, April 14

Time slots	Activity
12:00am	**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**
13:45 - 14:45	**Tutorial Lecture** **Theme:** Future AI Systems & Temporal Knowledge Graph Completion **Lecturer** Dr. Steve Chan, VTIRL, VT/I-PAC, USA **Chair** Petre Dini
14:45 - 15:00	**Coffee Break**
15:00 - 17:00	**Panel #1** **Theme** AI-based Computation Technologies - Benefits and Warnings **Moderator** Dr. Steve Chan, VTIRL, VT/I-PAC, USA **Panelists**

	Prof. Dr. Guido Russo, University of Naples Federico II, Italy Prof. Dr. Henry Chu, University of Louisiana at Lafayette, USA Dr. Steve Chan, VTIRL, VT/I-PAC, USA Prof. Dr. Petre Dini, IARIA, USA/EU
17:00 - 18:00	**Practical Overview** **Theme:** Where AI Could be Used and Where it Couldn't **Presenter** Prof. Dr. Petre Dini, IARIA, USA/EU
18:00 - 18:30	**Social Networking**
18:30 - 20:00	**Welcome Cocktail**

Monday, April 15

09:00 - 10:00	**Keynote Speech** **Theme**: Production Systems as Cloud-Based Applications **Speaker** Prof. Dr. Christoph P. Neumann, Ostbayerische Technische Hochschule Amberg-Weiden, Germany **Chair** Petre Dini
10:00 - 10:15	**Coffee Break**
10:15 - 12:00	**Session 1 [CLOUD/AICLOUDSEC I]**
12:00 - 13:00	Lunch on your own
13:00 - 14:45	**Session 2 [CLOUD/AICLOUDSEC II]**
14:45 - 15:00	**Coffee**
15:00 - 16:45	**Session 3 [PATTERS/A&A]**
16:45 - 17:00	**Coffee Break**
17:00 - 18:30	**Session 4 [ADAPTIVE, AICT, COGNITIVE]**
18:30 - 18:45	**Coffee**
18:45 - 20:45	**Session 5 [ICIW, COGNITIVE, PATTERNS, AICT]**

Tuesday, April 16

09:00 - 10:00	**Keynote Speech** **Theme**: Combining DevOps and Normalized Systems Toward Software Rejuvenation Factories **Speaker** Prof. Dr. Herwig Mannaert, University of Antwerp, Belgium **Chair** Christoph P. Neumann
10:00 - 10:30	**Coffee Break**
10:30 - 12:30	**Session 6 [FUTURE COMPUTING, ADAPTIVE, CLOUD COMPUTING, AIVR]**
12:30 - 14:00	Lunch on your own
14:00 - 16:00	**Panel #2** **Theme:** Systems Vulnerabilities - Software and Hardware Cybersecurity Concerns **Moderator** Prof. Dr. Andreas Aßmuth, Technical University of Applied Sciences OTH Amberg-Weiden, Germany **Panelists**

	Lieutenant Colonel Dr. Gerhard Schwarz, Bundeswehr (German Armed Forces), Germany Dr. Steve Chan, VTIRL, VT/I-PAC, USA Dr. Mika Helsingius, Finnish Defence Research Agency, Finland Prof. Dr. Andreas Aßmuth, Technical University of Applied Sciences OTH Amberg-Weiden, Germany
16:00 - 16:15	**Coffee**
16:15 - 18:00	**Session 7 [BUSTECH, AIVR, COGNITIVE]**
18:00 - 18:30	**Coffee Break**
18:30 - 20:30	**Panel #3** **Theme**: Readiness - Raising of Digital Technologies **Moderator** Prof. Dr. Herwig Mannaert, University of Antwerp, Belgium **Panelists** Prof. Dr. Hans-Werner Sehring, NORDAKADEMIE gAG, Germany Dr. Geert Haerens, Faculty of Applied Economics Antwerp University, Belgium Dipl. Ing. Andrey Vukolov, Elettra Sincrotrone Trieste, Italy Dr. Aurelie Mailloux, 2LPN, France Prof. Dr. Herwig Mannaert, University of Antwerp, Belgium

Wednesday, April 17

09:00 - 10:00	**Keynote Speech** **Theme**: Counterpoising Ambiguity/Uncertainty for AI Systems **Speaker** Dr. Steve Chan, VTIRL, VT/I-PAC, USA **Chair** Mika Helsingius
10:00 - 10:30	**Coffee Break**
10:30 - 11:30	**Session 8 [AIVR/FAME]**
11:30 - 11:45	**Coffee**
11:45 - 12:45	**Keynote Speech** **Theme**: Towards Unified Formal and Creative Software Development **Speaker** Prof. Dr. Hans-Werner Sehring, NORDAKADEMIE gAG, Germany **Chair** Steve Chan
12:45 - 14:30	Lunch on your own
14:30 - 16:00	**Session 9 [AIVR, SPWID, CONTENT]**
16:00 - 16:15	**Coffee**
16:15 - 18:00	**Session 10 [FUTURE COMPUTING, COGNITIVE]**
18:00 - 18:30	**Coffee Break**
18:30 - 20:15	**Panel #4** **Theme:** Training and Education through Virtual Reality - Boosting Digital Cognition and AI Literacy **Moderator** Prof. Dr. Hans-Werner Sehring, NORDAKADEMIE gAG, Germany **Panelists** Dr. Mika Helsingius, Finnish Defence Research Agency, Finland Dr. Yasmina Kebir, University of Lorraine, France

	Prof. Dr. Hans-Werner Sehring, NORDAKADEMIE gAG, Germany Prof. Dr. Petre Dini, IARIA, USA/EU
20:30 - 23:30	**Gala Dinner (Novotel Hotel)**

Thursday, April 18

09:00 - 10:00	**Keynote Speech** **Theme**: Urban Air Mobility - A New Frontier **Speaker** Prof. Dr. Kamesh Namuduri, University of North Texas, USA **Chair** Petre Dini
10:00 - 10:15	**Coffee**
10:15 - 12:00	**Panel #5** **Theme:** Adaptability at Work - Coping with Systems Complexity, Scalability, and High-Speed Communications **Moderator** Dr. Melanie Schranz, Lakeside Labs GmbH, Austria **Panelists** Prof. Dr. Kamesh Namuduri, University of North Texas, USA Prof. Dr. Hans-Werner Sehring, NORDAKADEMIE gAG, Germany Dr. Melanie Schranz, Lakeside Labs GmbH, Austria Prof. Dr. Petre Dini, IARIA, USA/EU
12:00 - 12:15	**Coffee break**
12:15 - 13:45	**Session 11 [ADAPTIVE, MOBILITY, ACCSE]**
	Coffee
13:45 - 15:00	**Open Discussion** **Theme**: Adapting for a Generative-AI World **Coordinators** Dr. Steve Chan, VTIRL, VT/I-PAC, USA Prof. Dr. Hans-Werner Sehring, NORDAKADEMIE gAG, Germany
15:00 - 15:15	**Farewell and Coffee** **Closing session: Petre Dini**

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 timetable is provided by the hotel.
From: Piazzale Roma

(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
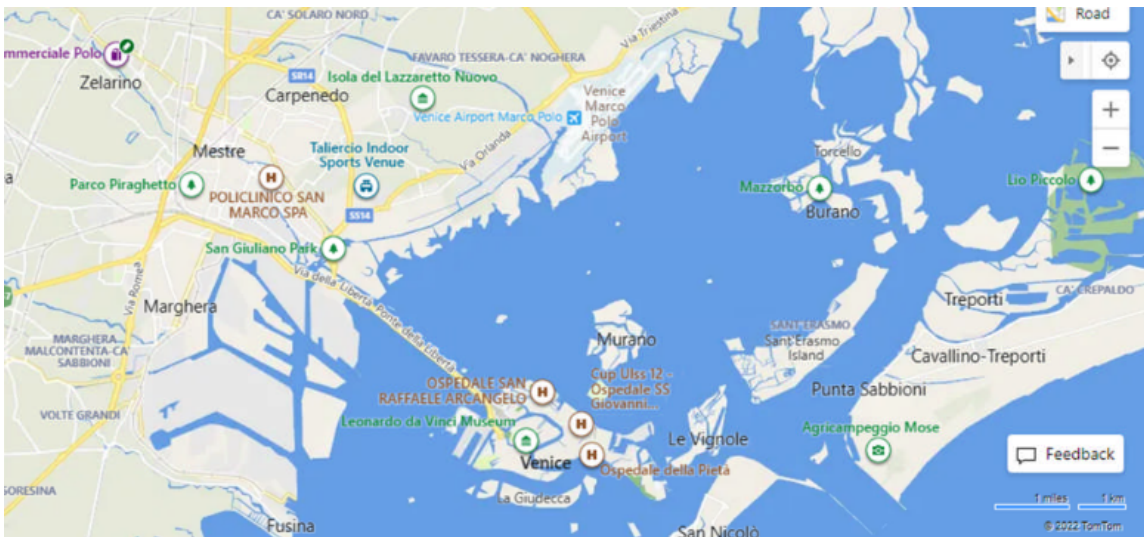Fenice Opera House
Church of San Marco
Dodges' Palace
San Marco Belltower
San Marco Piazza

(iii) Recommended
From San Marco Plaza – three islands: Murano, Burano, and Torcello.

Session 1 [CLOUD/AICLOUDSEC I] Monday
Session Chair: Andreas Aßmuth

Introduction
Andreas Aßmuth, Technical University of Applied Sciences OTH Amberg-Weiden, Germany
Christoph P. Neumann, Technical University of Applied Sciences OTH Amberg-Weiden, Germany
Sebastian Fischer, Ostbayerische Technische Hochschule Regensburg, Germany

Towards multi-domain multi-tenant situational awareness systems
Tobias Eggendorfer, TH Ingolstadt, Germany

Security enforcement within multiple Shared Information Space environments
Gerhard Schwarz, Gerhard Schwarz, Bundeswehr, Germany

Distinguishing Tor From Other Encrypted Network Traffic Through Character Analysis
Andreas Aßmuth, Technical University of Applied Sciences OTH Amberg-Weiden, Germany

Automated Vulnerability Scanner for the Cyber Resilience Act
Sebastian Fischer, Ostbayerische Technische Hochschule Regensburg, Germany

Session 2 [CLOUD/AICLOUDSEC II] Monday
Session Chair: Christoph P. Neumann

Vocabulary Attack to Hijack Large Language Model Applications
Christoph P. Neumann, Technical University of Applied Sciences OTH Amberg-Weiden, Germany

Task Offloading in Fog Computing with Deep Reinforcement Learning: Future Research Directions Based on Security and Efficiency Enhancements
Amir Pakmehr, Ostbayerische Technische Hochschule Amberg-Weiden, Germany

MANTRA: Elevating Cybersecurity Applications Through a Privacy-Preserving CTI Sharing Platform
Philipp Fuxen, OTH Regensburg, Germany

A Forensic Approach to Handle Autonomous Transportation Incidents within Gaia-X
Liron Ahmeti, Central Office for Information Technology in the Security Sector (ZITiS), Germany

Open discussion and Closing remarks
Moderators: Chairs

Session 3 [PATTERS/A&A] Monday
Session Chair: Geert Haerens

Introduction
Geert Haerens, Faculty of Applied Economics Antwerp University, Belgium

Systematic Rejuvenation of a Budgeting Application over 10 years: A Case Study
Jan Verelst, University of Antwerp, Belgium

Using Normalized Systems Expansion to Facilitate Software Migration - A Use Case
Christophe De Clercq, Fulcra, Belgium

Toward a Rejuvenation Factory for Software Landscapes
Herwig Mannaert, University of Antwerp, Belgium

Converging Clean Architecture with Normalized Systems
Gerco Koks, Zundert - Noord-Brabant, The Netherlands

Open discussion and Closing remarks
Moderator: Geert Haerens

Session 4 [ADAPTIVE, AICT, COGNITIVE] Monday
Session Chair: Augusto Tortora

A Method for the Runtime Monitoring of AI-based Environment Perception in Automated Driving Systems
Iqra Aslam, TU-Clausthal, Germany

Competition Analysis in Cellular Networks: Colombia case
Ernesto Cadena Muñoz, Universidad Distrital Francisco Jose de Caldas, Colombia

Restricting In-variance and Co-variance of Representations for Adversarial Defense in Vision Transformers
Henry Chu, University of Louisiana at Lafayette, USA

Study of Income for Companies that Provide Mobile Internet Service in Colombia
Luis Pedraza, Universidad Distrital Francisco José de Caldas, Colombia

Session 5 [ICIW, COGNITIVE, PATTERNS, AICT] Monday
Session Chair: Iqra Aslam

Digital Uses and Practices in Secondary Schools
Hafida Hammadi, Gustave Eiffel University, France

Promoting Self-Regulation for children with Autistic Spectrum Disorder with robots
Marie Rychalski, University of Lorraine, France

On the Distribution of the Queue Size in a Packet Buffer
Andrzej Chydzinski, Silesian University of Technology, Poland

Warm-Starting Patterns for Quantum Algorithms
Felix Truger, Institute of Architecture of Application Systems, University of Stuttgart, Germany

Implementation of LSTM Neural Networks for Predicting Competition in Telecommunications Market
Prof. Dr. Diego Armando Giral Ramírez, Universidad Distrital Francisco José de Caldas, Colombia

Session 6 [FUTURE COMPUTING, ADAPTIVE, CLOUD COMPUTING, AIVR] Tuesday
Session Chair: Hafida Hammadi

Big-data-oriented Computing on a mid-Size Data Center: the ADHOC Infrastructure
Augusto Tortora, University of Naples Federico II, Italy
Guido Russo, University of Naples Federico II, Italy

CollectByCycle: Towards an automatized condition assessment for bicycles
Marit Elke Anke Mathiszig, University of Technology Clausthal, Germany

The Impact of Virtual Reality on Pain Management During Orthodontic De-bonding
Aurelie Mailloux, Reims Hospital, URCA, France

Revolutionizing System Reliability: The Role of AI in Predictive Maintenance Strategies
Michael Bidollahkhani, Universität Göttingen, GWDG, Germany

Session 7 [BUSTECH, AIVR, COGNITIVE] Tuesday
Session Chair: Marie-Noelle Forget

Describing and Predicting the Acceptability of AI and Robotics towards Professional Identity with the Revised 4-A Model
Jérôme Dinet, University of Lorraine, France

Comparing CEM and CRM: A Literature Review
Marie-Noelle Forget, ESG UQAM, Canada

Development of Children's Crossing Skills in Urban Area: Impact of Age and Traffic Density on Visual Exploration
Jérôme Dinet, University of Lorraine, France

Session 8 [FAME/AIVR] Wednesday
Session Chairs: Lorenzo Stacchio, Pasquale Cascarano

Introduction
Lorenzo Stacchio, University of Bologna, Italy

AI for enhancing and preserving Dance Cultural Heritage: a Case Study on Rudolf Nureyev's Costumes
Lorenzo Stacchio, University of Bologna, Italy

Photogrammetry and 360° virtual tours: differences, relevance, and future possibilities
Pasquale Cascarano, University of Bologna, Italy

Open discussion and Closing remarks
Moderators: Chairs

Session 9 [AIVR, SPWID, CONTENT] Wednesday
Session Chair: Felix Conrad

Using Virtual Reality to Assess Communicational Skills During a Collaborative Task with Time Pressure
Yasmina Kebir, University of Lorraine, France

PAge @ Home - A Digital Personal Agent for Chronically Sick in the Home Environment
Chris Schröer, HCMB - Institute for Health Care Systems Management Berlin eG, Germany

Visual Artifacts in Software Engineering Processes
Hans-Werner Sehring, NORDAKADEMIE, Germany

Session 10 [FUTURE COMPUTING, COGNITIVE] Wednesday
Session Chair: Yasmina Kebir

The Triumvirate of an Adaptive Criteria Weighting Methodology, Isomorphic Comparator Similarity Measure, and Apropos High Dimensional Data Cluster Validation Index Measures for the Ascertainment of Bespoke Dynamic Fuzzy Lists
Steve Chan, VTIRL, VT/I-PAC, USA

A Metadata Model for Harmonising Engineering Research Data Across Process and Laboratory Boundaries
Felix Conrad, TU-Dresden, Germany

To Refurbish or not to Refurbish? Towards an AI-based Evaluation System for Power Tool Batteries
Dominique Briechle

Session 11 [ADAPTIVE, MOBILITY, ACCSE] Thursday
Session Chair: Petre Dini

Agent-based Modeling in the Edge Continuum using Swarm Intelligence
Melanie Schranz, Lakeside Labs GmbH, Austria

dPIDs - the Emerging Persistent Identification Technology for FAIR and The Digital Era Andrey
Vukolov, Elettra Sincrotrone Trieste, Italy

The Philosophy of UAS-to-UAS Communications
Kamesh Namuduri, University of North Texas, USA