On site Activities (preliminary) Program

Conference Hotel

Conference Venue Location

On site Program

Hotel Novotel Cap 3000
40 avenue du Verdun
06700 Saint Laurent du Var

Hotel: https://all.accor.com/hotel/0414/index.en.shtml
Phone: +33 4 93 19 55 55
Email: h0414@accor.com

Updated as of May 12, 2025

The program will be continuously updated.

DigitalWorld: https://www.iaria.org/conferences2025/DigitalWorld25.html

NexComm: https://www.iaria.org/conferences2025/NexComm25.html

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

Session conference rooms	Room A	Room B
Plenaries	Room A	

Sunday, May 18

11:00	**Registration starts** The registration desk is located in front of the conference rooms Open for the duration of the conference
13:00 - 13:15	**Welcome Opening Session**
13:15 - 14:15	**Keynote** **Theme:** Advances in Unmanned Aerial Vehicle Path Planning Techniques **Speaker** Acad., Emeritus Prof. Dr. Eugen Borcoci, National University of Science and Technology *Politehnica* Bucharest (UNSTPB), Romania **Chair** Alexey Cheptsov
14:15 - 14:30	**Coffee Break**
14:30 - 15:45	**Session 1 [DA I]**
15:45 - 16:00	Coffee
16:00 - 17:00	**Keynote Speech** **Theme:** Storage for Science - The bwSFS Project Journey **Speaker**

	Dr.-Ing. Alexey Cheptsov, TIK – Technische Informations und Kommunikationsdienste, Stuttgart, Germany **Chair** Eugen Borcoci
17:15 - 17:30	Coffee
17:30 - 18:30	**Keynote Speech** **Theme:** Technologies for Assistive Care **Speaker** Prof. Dr. Monika Maria Möhring, THM - University of Applied Sciences BliZ - Study Center for Blind and Disabled Students (THM) Giessen, Germany **Chair** Petre Dini
19:00 - 20:00	**Welcome Cocktail**

Monday, May 19

09:00 - 10:00	**Keynote Speech** **Theme:** High-level Interaction Design with Discourse Models for Automated GUI Generation **Speaker** Prof. Dr. Hermann Kaindl, TU Wien, Austria **Chair** Alexey Cheptsov	
10:00 - 10:15	**Coffee Break**	
10:15 - 12:00	**Session 2 [DA II]**	**Session 10 [eLmL, eKNOW]**
12:00 - 12:15	**Coffee**	
12:15 - 13:15	**Open Discussion #1** **Theme:** From LLMs to LCMs: Managing Concepts Assets **Coordinators:** Ad hoc	
13:15 - 15:00	Lunch on your own	
15:00 - 16:45	**Session 3 [STSA I]**	**Session 11 [ACHI, eLmL, eTELEMED. eKNOW]**
16:45 - 17:00	**Coffee break**	
17:00 - 18:45	**Session 4 [STSA II]**	**Session 12 [ICN, ALLSENSORS, PESARO, eTELEMED]**
18:45 - 19:00	**Coffee**	
19:00 - 20:45	**Panel #1** **Theme:** The Challenges of Human Interaction in the Digital Age **Moderator** Prof. Dr. Nitin Agarwal, University of Arkansas - Little Rock & University of California, Berkeley, USA **Panelists** Prof. Dr. Jan-Torsten Milde, Fulda University of Applied Sciences, Germany Dr.-Ing. Alexey Cheptsov, TIK – Technische Informations und Kommunikationsdienste,	

	Stuttgart, Germany Ph.D. Candidate Natalia Murashova, Østfold University College, Norway Prof. Dr. Hermann Kaindl, TU Wien, Austria

Tuesday, May 20

09:00 - 10:00	**Keynote Speech** **Theme:** Strategies for Successful Implementation of Digital Tools in Hospital and ICU **Speaker** Prof. MD. Svetlana Herasevich, Mayo Clinic - Rochester, USA **Chair** Lasse Berntzen
10:00 - 10:15	**Coffee Break**
10:15 - 12:00	**Session 5 [ICDS, ACHI, eTELEMED]** — **Session 13 [eLmL, ICONS, SOFTENG]**
12:00 - 12:15	**Coffee**
12:15 - 13:15	**Open Discussion #2** **Theme:** Digital Technologies and their Impact on Human Health **Coordinators:** Ad hoc
13:15 - 15:00	Lunch on your own
15:00 - 16:45	**Session 6 [AARS I]** — **Session 14 [eTELEMED]**
16:45 - 17:00	**Coffee break**
17:00 - 18:45	**Session 7 [AARS II]** — **Session 15 [ICONS, CTRQ]**
18:45 -19:00	**Coffee**
19:00 - 20:45	**Panel #2** **Theme:** Health Challenges in Digital Environments **Moderators** Prof. Dr Jonny Karlsson, Arcada University of Applied Sciences, Finland Prof. Dr. Panos Nasiopoulos, University of British Columbia, Canada **Panelists** Dr. Ove Lintvedt, University Hospital of North Norway, Norway Ph.D. Candidate Simin Mirzaei, University of British Columbia, Canada Sr. Lect. Ph.D. Candidate Thomas Hellstén, Arcada University of Applied Sciences, Finland Prof. Dr. Hirokazu Hasegawa, Center for Strategic Cyber Resilience R&D National Institute of Informatics, Japan

Wednesday, May 21

09:00 - 10:00	**Keynote Speech** **Theme:** Smart Alerts 2.0: Reducing Alarm Fatigue with Context-aware Clinical Decision Support **Speaker** Prof. Dr. Vitaly Herasevich, M.D., Ph.D, Mayo Clinic, USA **Chair** Robert Laurini
10:00 - 10:15	**Coffee Break**

10:15 - 12:00	**Session 8 [ICDS, eKNOW]**	**Session 16 [GeoProcessing, ALLSENSORS]**
12:00 - 12:15	**Coffee**	
12:15 - 12:45	**Invited Speech** **Theme:** Contributions of the NASA Deep Space Network to Science & Exploration **Speaker** Timothy T Pham, Jet Propulsion Laboratory, NASA, USA **Chair** Eugen Borcoci	
12:45 - 13:00	**Coffee**	
13:00 - 13:45	**Open Discussion #3** **Theme:** Dilemma between Education and Preparedness in Digital Space **Coordinators:** Ad hoc	
13:45 - 15:00	Lunch on your own	
15:00 - 16:45	**Session 9 [SPACOMM, MMEDIA, eTELEMED, ACHI]**	**N/A**
16:45 - 17:00	**Coffee break**	
17:00 - 18:00	**Keynote Speech** **Theme:** Introduction to City Digital Twins **Speaker** Prof. Dr. Robert Laurini, INSA Lyon | University of Lyon, France **Chair** Vitaly Herasevich	
18:00 - 18:15	**Coffee**	
18:15 - 19:00	**Open Discussion #4** **Theme:** Digital Space vs. Open Space: Different Kinds of "Gathering Together" **Coordinators:** Ad Hoc	
19:00 - 20:00	**Outdoor socializing Pre-dinner (drinks, finger food)**	
20:00 - 23:30	**Conference Dinner** **Novotel CAP 3000 Hotel**	

Thursday, May 22

09:00 - 10:00	**Keynote Speech** **Theme:** Science and Knowledge on Sensors to Build Food Security, Sustainability, and Wealth **Speaker** Prof. Dr. Paulo Estevao Cruvinel, Brazilian Corporation for Agricultural Research, Brazil
10:00 - 10:15	**Coffee Break**
10:15 - 12:00	**Panel #3** **Theme:** Challenges of Ubiquitous Sensing Systems **Moderator** Prof. Dr. Lasse Berntzen, University of South-Eastern Norway, Norway **Panelists** Prof. Dr. Przemyslaw Pochec, University of New Brunswick, Canada Dr. Roger Tilley, Sandia National Laboratories, USA Prof. Dr. Mohamed El-Darieby, Ontario Tech University, Canada Prof. Dr. Paulo Estevao Cruvinel, Embrapa, Brazil

12:15 - 12:30	**Coffee**
12:30 - 14:00	**Session 17 [ICONS, GEOProcessing]**
14:00 - 14:15	**Coffee break**
14:15 - 15:00	**Open Discussion #5** **Theme:** From Agentic Framework to an AI-based Artificial Engineer **Coordinators:** Ad hoc
15:00 - 15:15	**Coffee**
15:15 - 16:00	**Tutorial** **Theme:** Business Models for SME in AI Era **Lecturer** Prof. Dr. Petre Dini, IARIA, EU/USA
16:00 - 16:15	**Closing Session / Farewell**

Recommended tourist objectives to be visited on your own:

(a) Cap 3000 vicinity, Nice, Cannes, Sint Tropez

Allianz Riviera Stadium
Cap 3000
Marineland
Monaco City Center
Chagall Museum
Matisse Museum
Nice Old Town
Palais Nikaia
Parc Phoenix
Promenade des Anglais - Nice
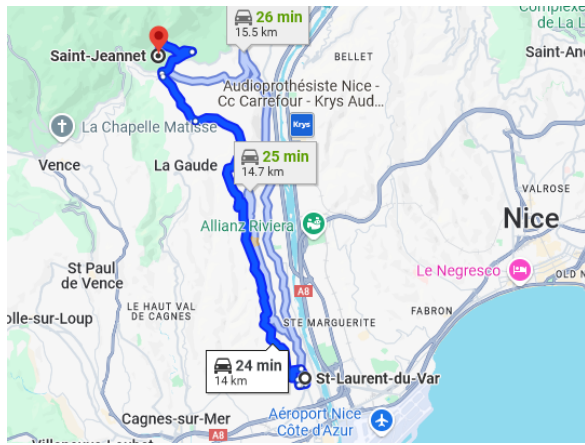Nautica Harbor – Nice
Cannes
Saint Laurent du Var
Saint Tropez

(b) Special group visit (suggestion: on site ad hoc group)
(c)

Saint-Jeannet, ~ 30-40 minutes, by bus #54 (Lignes d'Azur)

#54 bus schedule: https://moovitapp.com/index/en/public_transit-line-54-Nice-3260-854685-648274-2

Regular schedule hours: 07:13 - 19:42, frequency: 24-36 minutes

SESSIONS

Session 1 [DA I] Sun 14:30
Session Chair: Monika Maria Möhring

Introduction
Monika Maria Möhring, THM - University of Applied Sciences BliZ - Study Center for Blind and Disabled Students (THM), Giessen, Germany

88001 Accessible Representations of Visual Artifacts in Technical Informatics Education
Diethelm Bienhaus, University of Applied Sciences Gießen, Germany

88003 Automated Testing of Digital Accessibility – The Productivity Challenge
Dariana Lago, A11ySolutions, USA

Session 2 [DA II] Mon 10:15
Session Chair: Monika Maria Möhring

88002 Digital Accessibility for Persons with Colorblindness
Monika Maria Möhring, THM - University of Applied Sciences BliZ - Study Center for Blind and Disabled Students (THM), Giessen, Germany

88004 Digital Accessibility in International Research – the Case of Blind Scholars
David Smida, THM Giessen (BliZ), Germany

88005 The Impact of Digital Accessibility for the Pharmaceutical Industry
Andreas Deitmer, Instituto Universitário de Lisboa (ISCTE-IUL), Business Research Unit (BRU-IUL) and THM - University of Applied Sciences, BliZ -, Portugal and Germany

80038
Bridging the Digital Divide: Empowering Individuals with Cognitive Disabilities Through Digital Literacy
Kristina Deryagina, Siegen University, Germany

Open discussion and Closing remarks
Moderator: Monika Maria Möhring

Session 3 [STSA I] Mon 15:00
Session Chair: Paulo E Cruvinel

Introduction
Paulo Estevao Cruvinel, Embrapa, Brazil

78001 Reducing the Dead Zone Time effect of actuators in Sensor-Based Agricultural Sprayers under S-shaped functions Gain Scheduling Management of a Generalized Predictive Control (GPC) strategy
Deniver Schutz, São Carlos School of Engineering - University of São Paulo, Brazil

78002 Evaluation of an IoT System Used with Sensors for the Recognition of Invasive Plants in Groundnut Crops
Bruno Moraes Moreno, Federal University of São Carlos, Brazil

78004 Using Radar Chart Areas to Evaluate the Sensitivity of Electronic Nose Sensors in Detecting Water Stress in Soybean
Paulo S de Paula Herrmann Jr., Embrapa Instrumentation, Brazil

Session 4 [STSA II] Mon 17:00
Session Chair: Paulo Estevao Cruvinel

78005 Applicability Assessment of a Thermo-formed Piezoelectret Accelerometer in Agricultural Robotics Systems
Igor Nazareno Soares, Department of Electrical and Computer Engineering, Engineering School of São Carlos, University of São Paulo, Brazil

78006 A Prototype of a Monitoring Sensor System for Stored Grains in a Real-world Setting
Jose Pessoa, Embrapa Instrumentação, Brasil

78007 Sensor-Based Platform for Evaluation of Atmospheric Carbon Sequestration´s Potential by Maize Crops
Paulo Estevao Cruvinel, Embrapa, Brazil

Open discussion and Closing remarks
Moderator: Paulo Estevao Cruvinel

Session 5 [ICDS, ACHI, eTELEMED] Tue 10:15
Session Chair: Svetlana Herasevich

10021 Investment, Innovation, and Compulsory Spending: A Model of Public-Private Partnerships in Smart City Initiatives
Richard Schilling, Aesir Machina Corporation, USA

20043 From Tables to 3D-Models: Improving the Usability of Scientific Data Visualization
Dennis Marschall, Institute of Technology and Engineering (ITE), Germany

40005 Virtual Intercorporeality: Using Body Scan Meditation to Enhance Interoceptive Awareness and Presence in Telemental Health
Eileen Wurst, California Institute of Integral Studies, United States

40031 Using Explainable Machine Learning for Diabetes Management at Emergency Department
Silas Majyambere, Stockholm University, Sweden

Session 6 [AARS I] Tue 15:00
Session Chair: Lidia Ortega Alvarado

Introduction
Lidia Ortega Alvarado, University of Jaén, Spain

38001 Geospatial modelling for the optimal location of solar panels for agrivoltaic systems. A case study in olive groves
Maria Isabel Ramos, University of Jaén, Spain

38002 Development of a geospatial predictive system of crop yield in vineyards. A case study in Spain
Maria Isabel Ramos, University of Jaén, Spain

38004 Optimizing Picual Olive Variety Recognition through Deep Learning and Hyperspectral Imaging in Precision Agriculture
Lidia Ortega Alvarado, University of Jaén, Spain

Session 7 [AARS II] Tue 17:00
Session Chair: Lidia Ortega Alvarado

38005 Aerial Hyperspectral Analysis: Distinguishing Olive Varieties for Precision Agriculture
Lidia Ortega Alvarado, University of Jaén, Spain

38006 Extra virgin olive oil price prediction from multi-source variables and machine learning
Maria Isabel Ramos, University of Jaén, Spain

38008 Individual Recognition of Olive Trees Under Different Olive Planting Distributions
Pablo Latorre Hortelano, University of Jaén, Spain

Open discussion and Closing remarks
Moderator: Lidia Ortega Alvarado

Session 8 [ICDS, eKNOW] Wed 10:15
Session Chair: Claes Beckman

10017 The Smart Campus Conflict: Can There Be Security That Doesn't Violate Privacy? A Pilot Study among Estonian Students [PRESENTATION]
Kate-Riin Kont, Estonian Academy of Security Sciences, Estonia

10019 Image Processing Technique to Detect Adulteration of Food with Foreign Materials: A Systematic Review [PRESENTATION]
Shegaw Anagaw Mengiste, University of South-Eastern Norway (USN), Norway
Elsabet Wedajo Welde, Jimma University, Ethiopia

60008 VAULT: Verified Access Control for LLM-Based Knowledge Graph Querying
Maximilian Stäbler, German Aerospace Center (DLR), Germany

10030 Strategies for Successful Technology Adoption - Insights from Real-World Implementation Projects
Lasse Berntzen, University of South-Eastern Norway, Norway

Session 9 [SPACOMM, MMEDIA, eTELEMED, ACHI] Wed 15:00
Session Chair: Lasse Berntzen

20007 Throughput Analysis of Starlink Satellite Internet: A Study on the Effects of Precipitation and Hourly Variability with TCP and UDP
Claes Beckman, KTH Royal Institute of Technology, Sweden

50013 Proposal for a System to Estimate the Best Time to see Yellow Leaves using IoT Devices for Tourists
Shigeyoshi Ohno, Polytechnic University, Japan

40052 Factors Influencing User Satisfaction in Electronic Health Record Systems A Regression Analysis and its Relevance to the Valkyrie Project
Ove K Lintvedt, Norwegian Centre for E-health Research, Norway

20058 Ethical Risk Assessment of AI in Practice Methodology: Process-oriented Lessons Learnt from the Initial Phase of Collaborative Development with Public and Private Organisations in Norway
Natalia Murashova, Østfold University College, Norway

Session 10 [eLmL, eKNOW] Mon 10:15
Session Chair: Natalia Murashova

50028 Designing Professional Development Workshops to Foster Critical Thinking Skills in Hybrid Learning Environments [PRESENTATION]
Fatiha Bazouche, Ohio University, USA

50025 AI and the Online Classroom: Transitioning Online Discussions from Text-based to Video to Improve Student Engagement, Critical Thinking, and Build Career-related Skills
Daniel Farr, Kennesaw State University, Georgia, United States, United States

50014 Hybrid Harbors: Immersive Learning Spaces for Unsafe Regions
Nataliia Lazebna, Julius-Maximilians-Universität Würzburg, Germany

60016 Measuring Tacit Knowledge Hiding in IT Consulting Firms
Jason Triche, University of Montana, USA

Session 11 [ACHI, eLmL. eTELEMED, eKNOW] Mon 15:00
Session Chair: Daniel Farr

20049 CoMeSy: Multimodal Interaction with a Situated Cobot for Collaborative Tasks
Jan-Torsten Milde, Fulda University of Applied Sciences, Germany

50017 Reducing Achievement Gaps: Exploring How Learning by Doing Can Support Diverse Student Success
Rachel Van Campenhout, VitalSource, USA

40016 Size Matters: E-Health Implementation Challenges Across Norwegian Municipalities
Asbjørn Fagerlund, Norwegian Center for Ehealthreserch, Norway

60032 Identification and Characterization of Content Traps in YouTube Recommendation Network
Nitin Agarwal, COSMOS Research Center, University of Arkansas at Little Rock; ICSI, University of California, Berkeley, USA

Session 12 [ICN, ALLSENSORS, PESARO, eTELEMED] Mon 17:00
Session Chair: Jan-Torsten Milde

30005 Network-performance Evaluation for Millimeter-wave Information-centric Wireless-sensor- network Ecosystem in Actual City
Shintaro Mori, Fukuoka University, Japan

70020 Performance Improvement of Loop Closure Detection Using Semantic Segmentation in LiDAR SLAM
Masafumi Hashimoto, Doshisha University, Japan

60005 Contribution to the Application of the Adaptive Governance Model to Healthcare Systems
Karim Hardy, Embry-Riddle Aeronautical University, USA

40029 Method for Retrospective Analysis of Clinical Outcomes after Removal of Radiologist Assessment of AI-Positive Skeletal X-rays
Kristian Malm-Nicolaisen, Norwegian Centre for E-health Research, Norway

Session 13 [eLmL, ICONS, SOFTENG] Tue 10:15
Session Chair: Kerry Gilder

50022 Using Avatar based Virtual Learning Environments to avoid Zoom Fatigue in Tertiary Education
Gerhard Hube, Technical University of Applied Sciences Würzburg-Schweinfurt, Germany

40011 System Engineering Methods for Reliable Electrical Power Train Design for All Electric Aircraft
Anna-Lena Menn, Hochschule Bonn-Rhein-Sieg, Germany

40019 A PyTorch-Compatible Spike Encoding Framework for Energy-Efficient Neuromorphic Applications
Alexandru Vasilache, FZI Research Center for Information Technology, Germany

90016 Putting Business Goals in Context for Measurement
Luigi Lavazza, Università degli Studi dell'Insubria, Italy

Session 14 [eTELEMED] Tue 15:00
Session Chair: Silas Majyambere

40039 AI-Assisted UML Modeling for Serious Mental Illness Crisis Management
Kerry Gilder, Fordham University, USA

40047 Enhancing Fall Prediction in Older Adults: A Data-Driven Approach to Key Parameter Selection
Amadou M. Djiogomaye Ndiaye, Fondation Partenatiale de L'Universite de Limoges, France

40056 Accuracy Evaluation of Computer Vision-based Markerless Human Pose Estimation for Measuring Shoulder Range of Motion
Karlsson Jonny, Arcada University of Applied Sciences, Finland
Thomas Hellstén, Arcada University of Applied Sciences, Finland

40068 Zero-Shot Super-Resolution for Low-Dose CBCT Images Using Lightweight StereoMamba
Simin Mirzaei, The University of British Columbia, Canada

Session 15 [ICONS, CTRQ] Tue 17:00
Session Chair: Przemyslaw Pochec

40024 Security Risk Assessment System Based on the Similarity to Victims
Masahito Kumazaki Kyoto University, Japan

40026 GLACI: Arbitrary Code Instrumentation Tool for OpenGL
Shotaro Tsuboi, Nagoya University, Japan

40016 A Methodological Approach to Sustainable Product Development by Combining Life Cycle Assessment and Systems Engineering
Karolina Wirtz-Duerlich, Hochschule Bonn-Rhein-Sieg, Germany

70007 Effect of Error-Correction Coding Schemes on Maximum Throughput of Automated Tape Systems
Ilias Iliadis, IBM Research Europe - Zurich, Switzerland

Session 16 [GeoProcessing, ALLSENSORS] Wed 10:15
Session Chair: Timothy T Pham

30027 Spatio-Temporal Big Data Standards: Status and Progress
Peter Baumann, Constructor University Bremen GGMBH, Germany

70006 Free Space Microwave Stresses Sensing in Composites with Ferromagnetic Microwire Inclusions
Valentina Zhukova, Department of Polymers and Advanced Materials, University of the Basque Country, UPV/EHU, Spain

70002 Development of Magnetic Microwires with High Magneto-Impedance Effect
Arcady Zhukov, Department of Polymers and Advanced Materials, University of Basque Country, UPV/EHU, Spain

30031 Coordinates Are Just Features: Rethinking Spatial Dependence in Geospatial Modeling
Yameng Guo, Ghent University, Belgium

Session 17 [ALLDATA, GEOProcessing] Thu 12:30
Session Chair: Eugen Borcoci

80018 Numerical Experiments of Sensitivity Analysis for Fuzzy Reciprocal Matrix in AHP
Shin-ichi Ohnishi, Hokkai-Gakuen University, Japan

30041 A Workflow for Map Creation in Autonomous Vehicle Simulations
Mohamed El-Darieby, Ontario Tech University, Canada

30022 How Did Shared E-scooter Usage Change before and after the Enforcement of Parking Regulations?
Empirical evidence from Stockholm, Sweden
Pengxiang Zhao, Lund University, Sweden