



TIME (Berlin) CEST/UTC+2	Thu Oct 15	Fri Oct 16
09:00 AM - 09:30 AM	Delegates Check-in / Login	Delegates Arrive / Login
09:30 AM - 11:00 AM	Opening + Keynote Talks - Daniel Cremers, Technical University of Munich - Sadaf R. Alam, University of Bristol	Keynote Talks - Jeanette Miriam Lorenz, Fraunhofer IKS - Valeria Bartsch, Fraunhofer CML
11:00 AM - 11:30 AM	Poster Presentations + Break	Networking Break
11:30 AM - 12:45 PM	Paper Presentations - Session 1: Computing - Session 2: Smart Healthcare	Paper Presentations - Session 7: Intelligent Agents & Agentic AI - Session 8: Cybersecurity
12:45 PM - 01:30 PM	Lunch Break	Lunch Break
01:30 PM - 03:30 PM	Paper Presentations - Session 3: Data Engineering & ML Systems - Session 4: Smart Infrastructure & Digital Twins	Paper Presentations - Session 9: Learning & Human-Centered AI - Session 10: Security and Privacy
03:30 PM - 03:45 PM	Break	Break
03:45 PM - 05:00 PM	Paper Presentations - Session 5: Computer Vision - Session 6: Robotics and Automation	Paper Presentations - Session 11: Applied AI - Session 12: AI Ethics & Society
05:00 PM Onwards	Social Activity	Conference Closing (30 minutes)

Future Technologies Conference 2026

Day 1 - October 15, 2026

Session 1: Computing October 15 11:30 AM - 12:45 PM Room 2+3 Session Chair: Susanne Rosenthal 241 - Performance of Symmetric Multiprocessing in RTEMS-Based Flight Software Running on LEON4 (Pawel Buczek) 324 - Reproducible Builds for Quantum Computing (Iyan Mendez Veiga) 202 - Towards Trustworthy Exascale Computing: Deterministic Algorithms for Reproducible, GPU-Accelerated Digital Twins (Ayman Yousef) 215 - Hybrid Quantum-Classical Architectures Based on Encoded Qubit Mapping and Quantum Logic Operations (Nagi Mekhiel) 201 - Temporal Optimization for Container Scheduling in Kubernetes (Camilla Martins) 108 - Quantum Computing in Artificial Intelligence (Zih-Yi Wang)	Session 2: Smart Healthcare October 15 11:30 AM - 12:45 PM Room 5 Session Chair: Rose Baker 288 - Comparing Model-Free and Model-Based Offline Reinforcement Learning for Personalized Fluorouracil Dose Adaptation (Jomana Reusch) 329 - Sensor Fusion for Contactless Monitoring of Passengers' Vital Signs in a Shuttle-Emulator (Sven Gravemeier) 83 - Beyond End-to-End CNNs: A Systematic Comparison of Deep Feature-Based SVM and VGG16 for Brain Tumor Classification (Mahnoor Jamil) 256 - Hyperparameter-Optimized Benchmarking of Deep Learning Models for Diabetic Foot Ulcer Tissue Segmentation (Jose Eduardo Chairez Veloz) 338 - A Physics-Informed Machine Learning Framework for Predicting Extrusion Printability of Alginate-Methylcellulose Bioinks (Khulood Abu Maria, Sara Abu Tarboosh)
Session 3: Data Engineering & ML Systems October 15 01:30 PM - 03:30 PM Room 2+3 Session Chair: Domenico Sacca 39 - DUST: A Modular, Plugin-Driven Pipeline for Scalable Feature Engineering from Heterogeneous Time Series (Alexander Patola, Lars Gordon, Joel Wolber, Susanne Rosenthal) 287 - Learning-to-Rank Models for Predicting Horse Race Outcomes from Tabular Racing Features (Kenneth Nguyen) 203 - Unlocking UML Class Diagram Understanding in Vision Language Models (Artem Naboichenko) 88 - The Non-Backtracking Transition Probability Matrix and its Usage for Vertex Clustering (Hannu Reittu, Marianna Bolla) 144 - Computational Infrastructure Based on MongoDB and Machine Learning for Built-Up Surface Monitoring (Marco Antonio López Vega) 184 - Towards Trustworthy AI-Enhanced Migration of Quantity Surveying Cost Data: A Comparative ETL Benchmark (Mohd Nasir Saari) 190 - Validating Digital Financial Inclusion in OIC Countries: A Hybrid PCA-ML and Explainable AI Framework (Nassar Bashar Hussein Al Hafidh) 208 - Machine Learning-Driven Predictive Modelling and Optimization of Construction Build Up Rates (Nor Arzalifah Abd Razak) 189 - Who Succeeds and Why? A Leakage-Aware and Fairness-Aware Evaluation of Machine Learning for Student Performance Prediction (Mohamed Mustafa Mohamed Abofanas)	Session 4: Smart Infrastructure & Digital Twins October 15 01:30 PM - 03:30 PM Room 5 Session Chair: Rose Baker 176 - Artificial Intelligence, Urban Digital Twins, Law Compliance and Anonymity in Smart Cities (Julius Schöning) 158 - Development and Definition of Key Parameters for Police Analysis Using Digital Forensic Data in a Forensic Digital Investigation Twin (Dirk Volkmann) 84 - From Hidden Risks to Predictive Insights: How Artificial Intelligence is Transforming Mega-Infrastructure Project Management (Minnu Helen Joseph) 47 - Integrating AI-Driven Environmental Management and Financial Performance in Oil and Gas for Sustainable Operations and Green Energy Transition (Eldar Mardanov) 289 - Federated Learning with Uncertainty for Urban Water Dynamics (Golnoosh Abdollahinejad) 238 - Digital Twin Frameworks for Manufacturing Optimization in the Future Automotive Smart Factories (Shaaban Ali) 188 - Predictive Lyapunov Drift-Plus-Penalty Control for Multi-Access Traffic Steering in 5G Heterogeneous Networks (Ahmed Lateef Salih Al-Karawi) 6 - An Energy Harvesting (EH) Proposal Based on Radio Frequency (RF) as Node Power Supply Applications in Smart Wireless Sensor Networks (WSNs) (Diogo Ferreira Lima Filho) 110 - OntoSDSAM: An Ontology for Service Delivery in South African Municipalities (Jean Vincent Fonou Dombeu)

Session 5: Computer Vision

October 15 | 03:45 PM - 05:00 PM | Room 2+3

Session Chair: Susanne Rosenthal

278 - AI-Enhanced Template Matching for Symbol Detection in Technical Drawings (Borys Lomazov)

197 - Real-Time Elemental Mapping of X-ray Fluorescence Spectra Using Convolutional Neural Networks (Marcel Voelschow)

232 - Accelerating New Product Introduction for Visual Quality Inspection via Few-Shot Diffusion-Based Defect Synthesis (Serkan Hamdi Gügöl)

321 - Autonomous Robotic 3D Inspection Versus Expert Manual 3D Scanning for Quality Control in Small-Batch Manufacturing: Case Study (Kusai Almahamid)

Session 6: Robotics and Automation

October 15 | 03:45 PM - 05:00 PM | Room 5

Session Chair: Ahmed Elkaseer

119 - Open-Source Language Models for Industrial Decision Support: A Semi-Automated Scoping Review Towards Industry 5.0 (Toni Tani)

100 - Pilot Study: Trust, Privacy Concern, and Perceived Safety Before and After Physical Interaction with a Mobile Manipulator Robot (Joosep Parts)

328 - RoboCodeGen: Generating and Simulating Robot Control Policies from Natural Language (Guntis V. Strazds)

330 - An Intelligent Route Planning and Charging Management System for Electric Vehicle (Lekshmi R. R.)

199 - The Slow Food of Labour: A Task-Structural Analysis of Human-Centred Resilience in AI-Driven Labour Markets (Ilona Erika Negro)

Future Technologies Conference 2026 Day 2 - October 16, 2026

Session 7: Intelligent Agents & Agentic AI

October 16 | 11:30 AM - 12:45 PM | Room 2+3

Session Chair: Domenico Sacca

174 - A Multi-Level Governance Architecture for Agentic AI Risk Mitigation (Neil H. Wasserman)

153 - A Potentialization Algorithm for Games with Applications to Multi-Agent Learning in Repeated Games (Sharwin Rezagholi)

211 - Agent-Driven Evaluation of Generative AI Agents (Daiga Dekšne)

61 - Agentic RAG: Building an Accurate, Trustworthy AI Agent for Technical Support in Industrial Computing and Automation (Ilham Supriyanto)

316 - Vibe No-Coding Framework: From Business Requirements Dialogue to Executable and Evolving Business Applications Through Knowledge Representation, Agentic AI, and a No-Code Platform (Abdelhadi Rouam)

Session 8: Cybersecurity

October 16 | 11:30 AM - 12:45 PM | Room 5

Session Chair: Pascal Lorenz

17 - TRACE4EU: Enhancing Use Case Onboarding Process and Cybersecurity for EBSI Integration (Kai Hendrik Wöhnert)

35 - Secure Your Cloud Journey, One Zero-Trust Step at a Time (Perri Nejib)

163 - An AI-Assisted Framework for Automated Malware Reverse Engineering and Analysis (Alexander Schoolcraft, Bryson Payne)

205 - The Importance of Critical Technologies for the CSDP and Countering Disinformation Phenomena (Andrea Ruffo)

10 - Bracing for the Invisible Battlefield: Assessing Cyberwarfare Readiness in Developing Nations (Khutso Lebea)

Session 9: Learning & Human-Centered AI

October 16 | 01:30 PM - 03:30 PM | Room 2+3

Session Chair: Ilham Supriyanto

- 187 - OME6-AI: A Design-Based Framework for Contextualized Artificial Intelligence in STEM Education Through Game-Based Learning and Edge AI Systems ([Ignace Kasiama Mupalanga](#))
- 248 - Pedagogical Reflections on Innovations and Concerns of Slovak Teachers Regarding the Use of Artificial Intelligence in Education ([Veronika Valkóová](#))
- 103 - Exploring the Impact of Immersive Technologies in Teacher Education ([Karan Singh Chaudhary](#))
- 124 - From Code Generation to Demonstrable Understanding ([Andres Käver](#))
- 115 - Analyzing System Requirements with ChatGPT ([Leena Hellman](#))
- 290 - NUDGED: A Preliminary UX and Prototype Study for Workplace Mental Fatigue Support ([Tamika Arnold](#))
- 65 - Enhancing LLM-Based Search with a Semantic Concept Graph: A Large-Scale Evaluation ([Hermann Bense](#))
- 40 - AI-Driven Security in DTN-Based eLearning Networks in Critical Scenarios ([Justino Lourenço](#))
- 284 - The Digital Handwriting Scorer: A Kinematic Intelligent Tutoring System for Early Childhood Literacy ([Mostafa Rabeea Marzouk](#))

Session 10: Security and Privacy

October 16 | 01:30 PM - 03:30 PM | Room 5

Session Chair: Marianna Bolla

- 95 - A Multi-Layer Framework for Anti-Counterfeiting ([Domenico Sacca](#))
- 285 - Layered Security Testing for Small Development Teams Using DAST, SAST, SCA, and AI-Assisted Code Review ([Kaisa Liiv](#))
- 228 - Model-Informed Protection of Mixed Reality Headset Users from Adversarial Physiology Attacks ([Nikolai Petsev](#))
- 311 - Replay-Based Pilot Adaptation for OCPP Intrusion Detection under Domain Shift in EV Charging Infrastructure ([Maria Makrynioti](#))
- 333 - Assessment of Transformer-Based Architectures for Intrusion Detection in Automotive CAN Network ([Ahmed Elkaseer](#))
- 105 - From Jailbreaks to Agentic Attacks: A Survey of Security Threats and Defenses in Large Language Models ([Omar Mansour](#))

Session 11: Applied AI

October 16 | 03:45 PM - 05:00 PM | Room 2+3

Session Chair: Ahmed Elkaseer

- 307 - AI-Based Facial Expression Analysis of Federal Reserve Press Conferences and Intraday Market Reactions ([Jiachuan Wang](#))
- 14 - An Initial Study of an Obsolescence-Resilient Computer System Architecture Based on the Bare Machine Computing Paradigm ([Ramesh Karne](#))
- 275 - IoTGuardFSM: A Lightweight Behavioral Finite State Machine for Runtime Security Enforcement in IoT Devices ([Mojtaba Akbari](#))
- 38 - SYNAPSE: Greenwashing Detection in Corporate ESG Reports Through NeuroSymbolic AI and Counterfactual Reasoning ([Kaveesha Fernando](#))

Session 12: AI Ethics & Society

October 16 | 03:45 PM - 05:00 PM | Room 5

Session Chair: Ilham Supriyanto

- 106 - Ethical Governance of Generative AI in Higher Education ([Rose Baker](#))
- 254 - Towards a Lifecycle Framework for Assumption-Aware Robustness Assurance of Human-Interacting Safety-Critical Systems ([Astrid Rakow](#))
- 91 - AI-Driven Workforce Transformation ([Sandra Starke](#))