

# Agenda - Future Technologies Conference (FTC) 2025

6-7 November 2025 | Munich, Germany



TIME (Munich) CET/UTC+1	Thu Nov 6	Fri Nov 7
09:00 AM - 09:30 AM	Delegates Check-in	Delegates Arrive
09:30 AM - 11:00 AM	Opening + Keynote Talks  • Mario Trapp, Fraunhofer IKS  • Torsten Schön, Technische Hochschule Ingolstadt	<ul><li>Keynote Talks</li><li>Wojciech Samek, TU Berlin</li><li>Gitta Kutyniok, Ludwig-Maximilians-Universität</li></ul>
11:00 AM - 11:30 AM	Poster Presentations   Networking Break	Networking Break
11:30 AM - 12:30 PM	Paper Presentations <ul><li>Session 1: Computer Vision</li><li>Session 2: Data Science</li></ul>	Paper Presentations <ul><li>Session 7: Artificial Intelligence</li><li>Session 8: Computing</li></ul>
12:30 PM - 01:30 PM	Lunch	Lunch
01:30 PM - 03:15 PM	Paper Presentations <ul><li>Session 3: Deep Learning</li><li>Session 4: Smart Healthcare</li></ul>	Paper Presentations <ul><li>Session 9: Security</li><li>Session 10: e-Learning</li></ul>
03:15 PM - 03:30 PM	Networking Break	Networking Break
03:30 PM - 04:30 PM	Paper Presentations <ul><li>Session 5: Computer Vision</li><li>Session 6: Data Science</li></ul>	Paper Presentations <ul><li>Session 11: Human Computer Interaction</li><li>Session 12: Internet of Things</li></ul>
04:30 PM Onwards	Munich City Tour (Itinerary on Page 3)	Conference Closing (30 minutes)

## Future Technologies Conference 2025 Day 1 - November 6, 2025

Session 1: Computer Vision  November 6   11:30 AM - 12:30 PM   Nyhmphenburg  Session Chair: Armin Grasnick	Session 2: Data Science  November 6   11:30 AM - 12:30 PM   Hohenschwangau  Session Chair: Christian Greiner
191 - A Case Study for Immersive Technology-Based Evidence Representation (Dirk Labudde, Dirk Volkmann)  123 - Humans in the Loop: An Empirical Research on Al Literacy as an Indicator for Workforce Readiness in Human-Al Interaction (Christian Greiner)  74 - Enhancing Visual Performance: Contrast Polarity, Visual Search, and Distractor Suppression (Jakob Lutkemeier)  182 - Tiny Neural Approximators for Real-time Rendering Decisions Based on Discrete Cosine Transform Image Representation (Armin Grasnick)  299 - VR-CybSA: Towards Virtual Reality-Enhanced Situational Awareness in Cyber Range Training (Amalia Damianou)	177 - Price Models for Diagnostic Decision Support: Market Structure Analysis and Future Trends (Jan Kirchhoff)  183 - A Methodology for the Development and Qualification of a Risk-Based Testing Strategy for Industrial Data: A Case Study on the Automotive Sector (Thomas Riedel)  193 - An AutoML Design Pattern Focusing on Transparency, Extendibility and Efficiency (Susanne Rosenthal, Lars Gordon, Alexander Patola, Joel Wolber)  81 - MTM-HWD® (Human Work Design): Ten Years of Application in the Industrial Field Worldwide (Thomas Finsterbusch)  53 - Practical Decisions for Development of Retrieval-Augmented Generation Systems (Marcis Pinnis)  145 - Equipping a Conversational Agent with Business Expertise and Reasoning for Automated Requirements Specification and Application Development (Abdelhadi Rouam

### **Session 3: Deep Learning**

November 6 | 01:30 PM - 03:15 PM | Nyhmphenburg Session Chair: Dirk Labudde

- 70 Lightweight Hopfield Neural Networks for Bioacoustic Detection and Call Monitoring of Captive Primates (Wendy Lomas)
- 64 Investigating the Applicability of Long Short-Term Memory (LSTM) Algorithm in Project Decision-Making (Mirza Muntasir Nishat)
- 230 Artificial Intelligence Enabled Customer Transaction Prediction (Daniel Osaroboh Atalor)
- 282 VLM@school: Evaluation of Al Image Understanding on German Middle School Knowledge (Vincent Tischler)
- 154 A Multi-Method Active Liveness Detection Approach for Spoofing Detection: Integrating Blink, Head Movement, and Facial Expression Analysis (Abel Méndez Porras)
- 208 Leveraging Transfer Learning for Government Auditing: Multiclass Classification of Financial Statements in Brazil for Review (Goreti Marreiros)
- 283 Can Foreign Datasets Help Improve Plankton Classification Performance for Local Data? (Malini Ramberran)
- 313 SWOT Analysis of Metaverse Integration in Engineering Education: Case Study Faculty of Engineering and Technologies at Trakia University, Bulgaria (Veselina Nedeva)

#### **Session 4: Smart Healthcare**

November 6 | 01:30 PM - 03:15 PM | Hohenschwangau Session Chair:

- 235 Assessing the Applicability of Machine Learning Techniques to Detect Fungal Infection in Apples Using Mass Spectrometry Data (Nageena Frost)
- 199 Development of a Digital Nose System for Early Detection of Plant Stress (Georg Roman Schneider)
- 39 Exploring the Future of Chronic Care: Preliminary Insights from a Qualitative Investigation of Artificial Intelligence Integration in Virtual Consultations (Pranavsingh Dhunnoo)
- 257 Deep Learning Dominated Method for Assessment of Toric Intraocular Lens Rotation (Zsolt Saffer)
- 266 Forecasting for Social Welfare: Bayesian Logic to Optimize the Equitable Distribution of High-Cost Medicines (Marco Javier Suárez Barón)
- 150 Correlating Audio and Capacitance Mice Activity Monitoring in Pre-Clinical Studies (Marc Dimbiniaina Randriatsimiovalaza)
- 228 Using Diffusion Models to Synthesize Patches of Histological Images Based on Nuclear Atypia Score (Maros Kollár)
- 78 Real-Time IoT-Cloud-Based RFID and AI-ECG Sensors Application for Secure and Remote Home Health Monitoring Systems (Belal Chowdhury)
- 178 Diagnosis Recommendation System (Nihal Yakut)

Session 5: Computer Vision  November 6   03:30 PM - 04:30 PM   Nyhmphenburg  Session Chair: Armin Grasnick	Session 6: Data Science November 6   03:30 PM - 04:30 PM   Hohenschwangau Session Chair: Susanne Rosenthal
67 - Monocular Depth Estimation for Obstacle Avoidance: To Know if it Works Well (Tamás Márk Fehér)	73 - Topological Analysis of the Word Embedding Space for Document Genre Classification (Jordan Brennan)
198 - Virtual Reality Campus Navigation Incorporating Inclusion, Diversity, Equity, and Accessibility (Andrew Park)	95 - Explainable Concept Drift Detection: A SHAP-Centric Approach for Identifying Evolving Distributions (Christoph Reich)
9 - Ethics in Artificial Intelligence for Virtual Reality: Navigating Challenges Under the EU AI Act (Reno Yuri Camilleri)	131 - A Comparative Analysis of ARIMA and LSTM Models for Bitcoin Price Prediction (Alessandro Bruno)
260 - Amplifying Robotics Capacities with a Human Touch: An Immersive Human-Machine Interaction System (Dewei Han)	284 - NRW22-Stance: Dataset for Continuous Multi-Target Stance Detection Towards German Political Actors (Arthur Müller)
335 - Harnessing Unreal Engine for the Development of Extended Reality Platforms for Remote Building Management (Olushola Akinshipe)	303 - A Hybrid WAAM Data-Driven Monitoring System to Correlate Electrical Signals with the Contact-Tip-Working-Distance (Paul Rosero)

### 04:30 PM onwards - Free Munich City Tour!

Join us for an unforgettable evening as we explore the charm of Munich together! Get ready for a journey through the city's most iconic landmarks, soak in its rich history, and capture those picture-perfect moments along the way

4:30 pm - Departure from Conference Venue

4:30 pm - 7:30 pm: Guided bus tour of Munich's highlights (with short photo stops and walking, weather permitting)

7:30 pm - 8:30 pm: Bavarian stopover at Augustiner Keller: enjoy local food (self-pay) in one of Munich's most traditional beer gardens

9:00 pm: Return to Leonardo Hotel Munich Arabellapark

# Future Technologies Conference 2025 Day 2 - November 7, 2025

Session 7: Artificial Intelligence November 7   11:30 AM - 12:30 PM   Nyhmphenburg Session Chair: Susanne Rosenthal	Session 8: Computing November 7   11:30 AM - 12:30 PM   Hohenschwangau Session Chair:
141 - Legendre Chaotic Neural Network with Negative Self-Feedback Memory for Continuous Function Optimisation (Emily Rodden)	49 - Design and Implementation of Integrated Al Scheduler for Dynamic Cloud Workloads Allocation in Kubernetes Environments (Michael Bidollahkhani)
312 - The State of Adoption of AI in Software Engineering: A Preliminary Survey on Sub-Saharan Africa (Micheal Tuape)	16 - Quantum Adoption: A Comparative Analysis of Quantum and Cloud Adoption Requirements (James Hornage Jr)
139 - Evaluating Viaduct Surface Cracking on SLAM Point Clouds: Insights from an Italian Case Study (Nicole Pascucci)	247 - Simple Quantum Computing Implemented in Silicon with Decoupling and Encoding Quantum Bits in Classical Data (Nagi Mekhiel)
209 - Shadow Management: Leveraging Responsible Agentic AI to Revolutionize Safe Decision-Making in Complex Organizations (Mohammad Sajjad Ghaemi)	101 - Visualized Cognitive Training Using Virtual Reality (Gajendran Sethuramalingam)
306 - Integrating Emotional, Personal, and Social Intelligences in Complex Collective Decision-Making (Amine Chohra)	143 - MATRIX: Modeling Horizontal Pod Autoscaling with TRained Intelligence for eXtreme Edge Efficiency (Garrik Brel Jagho Mdemaya)

<b>Session 9: Security</b> November 7   01:30 PM - 03:15 PM   Nyhmphenburg Session Chair:	Session 10: e-Learning November 7   01:30 PM - 03:15 PM   Hohenschwangau Session Chair:
229 - Perceptions of Blockchain Adoption Among Romanian Civil Servants: An Exploratory Survey (Cristina Carata)	271 - Adaptive Historical Education Through Generative AI and Immersive Game Design (Meisam Taheri)
54 - Engineering Risk-Aware, Security-by-Design Frameworks for Assurance of Large-Scale Autonomous Al Models (Krti Tallam)	125 - Rewiring Governance: Building a Data-Centric Ecosystem for Higher Education Strategic (and Digital) Transformation (Tiago H. Moreira de Oliveira)
129 - The Quantum-Safe Key-Distribution Mechanism Having Non-Conjectured Hardness, While Scalable for a Vernam Cipher, Under Shannon Conditions (Adrian Neal)	<ul> <li>172 - iSmart Guide: Transforming Adult Learning with Al-Powered Personalization (LEE Wee Leong)</li> <li>197 - Investigating Design Effects on Cognitive Load and Gaze Behavior in a VR Lab Course Environment (Raphael Cera)</li> </ul>
273 - A Modular Tool for Exploring the Elliptic Curve Digital Signature Algorithm (Eliseo Sarmiento Rosales, Jorge Gael Lopez Figueras)	50 - Strengthening Collaborative Learning Through Structured Task Distribution: An Innovative Approach to Group Projects (Livinus Obiora Nweke)
196 - Zero Trust: Beyond Technology (Perri Nejib, Edward Yakabovicz)	148 - Integration of Al Code-Writing Assistants in IT Higher Education (Andres Käver, Janika Leoste, Kristel Marmor)
<ul> <li>106 - Confidential and Authentic Communication Algorithms Between UAVs for Target Surveillance in United Kingdom (Daniel Osaroboh Atalor)</li> <li>160 - Raising Cybersecurity Awareness Among Departmental Employees:</li> <li>Implementation of Trend Micro's Phish Insight Tool (Azhar Raza Firdousi)</li> </ul>	200 - Reengineering and Application of the Gross Motor Skills Training System from the Artificial Intelligence and Assistive Technologies Research Group (GIIATA-U.P. (Luis Javier Serpa Andrade)  152 - Gamified Mobile App for Financial Education: An Innovative Experience in a Brazilian Public University (Luci Longo)

Session 11: Human Computer Interaction  November 7   03:30 PM - 04:30 PM   Nyhmphenburg  Session Chair: Christian Greiner	Session 12: Internet of Things November 7   03:30 PM - 04:30 PM   Hohenschwangau Session Chair: Susanne Rosenthal
128 - Low Fidelity to High Functionality: Transforming Concepts into Working Models (Tamirat Abegaz)	33 - The Use of Artificial Intelligence in a Myo-to-Gesture Device (Klaus Buchenrieder)
281 - Al Applications in Digital Histopathology Education: A Case Study (Martin Dubovský)	204 - Real-Time Digital Carbon Footprint Management Using Al and IoT Technologies (Azza Basiouni)
310 - Prototyping Framework for Interactive Annotation Interfaces in Medical Domain (Miroslav Laco)	258 - Actionable Cybersecurity Notifications for Smart Homes: A User Study on the Role of Length and Complexity (Victor Jüttner)
311 - Modified Double Diamond Design Methodology for Innovative Interfaces in Medical Domain (Erika Váczlavová)	91 - Efficient Human Activity Recognition on Smartwatch Sensors Using Knowledge Distillation (Narit Hnoohom)