FTC 2025
6-7 November | Munich, Germany

Agenda - Future Technologies Conference (FTC) 2025

6-7 November 2025 | Munich, Germany

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SAI Conferences

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 (Nyhmphenburg) • Mario Trapp, Fraunhofer IKS • Gitta Kutyniok, Ludwig-Maximilians-Universität	Keynote Talks (Nyhmphenburg) • Wojciech Samek, TU Berlin • Stefan Wagner, Technical University of Munich
11:00 AM - 11:30 AM	Break (Foyer)	Break (Foyer)
11:30 AM - 12:30 PM	Paper Presentations • Session 1: Computer Vision (Nyhmphenburg) • Session 2: Data Science (Hohenschwangau)	Paper Presentations • Session 7: Artificial Intelligence (Nyhmphenburg) • Session 8: Computing (Hohenschwangau)
12:30 PM - 01:10 PM	Lunch (Restaurant)	Lunch (Restaurant)
01:10 PM - 01:30 PM	Facilitated Networking (Nyhmphenburg)	
01:30 PM - 03:15 PM	Paper Presentations • Session 3: Deep Learning (Nyhmphenburg) • Session 4: Smart Healthcare (Hohenschwangau)	Paper Presentations • Session 9: Security (Nyhmphenburg) • Session 10: e-Learning (Hohenschwangau)
03:15 PM - 03:30 PM	Break (Foyer)	Break (Foyer)
03:30 PM - 04:30 PM	Paper Presentations • Session 5: Computer Vision (Nyhmphenburg) • Session 6: Data Science (Hohenschwangau)	Paper Presentations • Session 11: Human Computer Interaction (Nyhmphenburg) • Session 12: Internet of Things (Hohenschwangau)
04:30 PM Onwards	Munich City Tour (Itinerary on Page 3)	Conference Closing (Nyhmphenburg - 30 min)

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

191 - A Case Study for Immersive Technology-Based Evidence Representation (Dirk Labudde, Dirk Volkmann)

123 - Humans in the Loop: An Empirical Research on AI Literacy as an Indicator for Workforce Readiness in Human-AI 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)

Session 2: Data Science
November 6 | 11:30 AM - 12:30 PM | Hohenschwangau
Session Chair: Christian Greiner

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 AI 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, Heloisa Guimarães Coelho)

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: Alessandro Bruno

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: Alessandro Bruno
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)
335 - Harnessing Unreal Engine for the Development of Extended Reality Platforms for Remote Building Management (Olushola Akinshipe)	284 - NRW22-Stance: Dataset for Continuous Multi-Target Stance Detection Towards German Political Actors (Arthur Müller)
291 - Apple Leaf Disease Detection: A Comprehensive Analysis of Pre-Trained Models and Platform Development (Masoud Shakiba)	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
8:30 pm - 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: Sergei Gorlatch
141 - Legendre Chaotic Neural Network with Negative Self-Feedback Memory for Continuous Function Optimisation (Emily Rodden)	49 - Design and Implementation of Integrated AI 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)	101 - Visualized Cognitive Training Using Virtual Reality (Gajendran Sethuramalingam)
209 - Shadow Management: Leveraging Responsible Agentic AI to Revolutionize Safe Decision-Making in Complex Organizations (Mohammad Sajjad Ghaemi)	260 - Amplifying Robotics Capacities with a Human Touch: An Immersive Human-Machine Interaction System (Dewei Han)
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)

Session 9: Security

November 7 | 01:30 PM - 03:15 PM | Nyhmphenburg

Session Chair: Tamirat Abegaz

229 - Perceptions of Blockchain Adoption Among Romanian Civil Servants: An Exploratory Survey (Cristina Carata)

54 - Engineering Risk-Aware, Security-by-Design Frameworks for Assurance of Large-Scale Autonomous AI Models (Krti Tallam)

129 - The Quantum-Safe Key-Distribution Mechanism Having Non-Conjectured Hardness, While Scalable for a Vernam Cipher, Under Shannon Conditions (Adrian Neal)

273 - A Modular Tool for Exploring the Elliptic Curve Digital Signature Algorithm (Eliseo Sarmiento Rosales, Jorge Gael Lopez Figueras)

196 - Zero Trust: Beyond Technology (Perri Nejib, Rebecca James)

106 - Confidential and Authentic Communication Algorithms Between UAVs for Target Surveillance in United Kingdom (Daniel Osaroboh Atalor)

160 - Raising Cybersecurity Awareness Among Departmental Employees: Implementation of Trend Micro's Phish Insight Tool (Azhar Raza Firdousi)

327 - Mitigating Phishing Email Threats Through Detection and Filtering: A Model Proposal (Sunday Eric Adewumi)

Session 10: e-Learning

November 7 | 01:30 PM - 03:15 PM | Hohenschwangau

Session Chair: Sergei Gorlatch

271 - Adaptive Historical Education Through Generative AI and Immersive Game Design (Meisam Taheri)

125 - Rewiring Governance: Building a Data-Centric Ecosystem for Higher Education Strategic (and Digital) Transformation (Tiago H. Moreira de Oliveira)

172 - iSmart Guide: Transforming Adult Learning with AI-Powered Personalization (LEE Wee Leong)

197 - Investigating Design Effects on Cognitive Load and Gaze Behavior in a VR Lab Course Environment (Raphael Cera)

50 - Strengthening Collaborative Learning Through Structured Task Distribution: An Innovative Approach to Group Projects (Livinus Obiora Nweke)

148 - Integration of AI Code-Writing Assistants in IT Higher Education (Andres Käver, Janika Leoste, Kristel Marmor)

200 - Reengineering and Application of the Gross Motor Skills Training System from the Artificial Intelligence and Assistive Technologies Research Group (GIIATA-U.P.S.) (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

128 - Low Fidelity to High Functionality: Transforming Concepts into Working Models (Tamirat Abegaz)

281 - AI Applications in Digital Histopathology Education: A Case Study (Martin Dubovský)

310 - Prototyping Framework for Interactive Annotation Interfaces in Medical Domain (Miroslav Laco)

311 - Modified Double Diamond Design Methodology for Innovative Interfaces in Medical Domain (Erika Vázclavová)

Session 12: Internet of Things

November 7 | 03:30 PM - 04:30 PM | Hohenschwangau

Session Chair: Susanne Rosenthal

33 - The Use of Artificial Intelligence in a Myo-to-Gesture Device (Klaus Buchenrieder)

204 - Real-Time Digital Carbon Footprint Management Using AI and IoT Technologies (Azza Basiouni)

258 - Actionable Cybersecurity Notifications for Smart Homes: A User Study on the Role of Length and Complexity (Victor Jüttner)

91 - Efficient Human Activity Recognition on Smartwatch Sensors Using Knowledge Distillation (Narit Hnoohom)