I4CS Program Overview

Tuesday, June 10, 2025

19:00   Informal Welcome Meeting, jointly with CONTAIN project

Wednesday, June 11, 2025

08:00   Registration
08:45   Conference Opening
09:15   **Keynote** *by Thomas Gabor (LMU Munich):*
       "What will Artificial Intelligence do on Its Own"
10:15   Coffee Break
10:30   **Session 1**: Recognition and Verification
12:00   Lunch Break
12:45   **Session 2**: Computational Intelligence
14:15   Tea Break
14:30   **Session 3**: Data Processing
16:00   Community Event Activity
18:00   Dinner

Thursday, June 12, 2025

08:30   **Session 4**: Quantum Computing
10:00   Coffee Break
10:30   **Session 5**: Public Sector
12:00   Lunch Break
12:45   **Invited Talk** *by Sebastian Feld (Delft Univ. of Technology):*
       "Full-Stack Quantum Computing and Distributed Systems:
       a Community-Centric Approach"
14:00   Community Event Activity
19:00   Conference Dinner

Friday, June 13, 2025

09:00   **Session 6:** Serious Games
10:30   Coffee Break
11:00   **Invited Talk** *by Tobias Fertig (Technical University of
       Applied Sciences Würzburg-Schweinfurt),* "More Than Just
       Passwords: The Social Impact of Security Awareness"
12:00   Lunch Break
12:45   **Session 7:** Information Security
14:30   Awards / Announcement of I4CS 2026 / Closing

St. Maximilian Church @ River Isar © Zielinski

Conference Venue

In 2025, under the motto "Celebrating I4CS' Quarter-Century", the I4CS Steering Committee would like to invite the academic community to the city of Munich, Germany. Known for its rich history, cultural heritage, and technological advancements, Munich offers an ideal setting for fostering innovative discussions and collaborative research.

The conference will be held at the prestigious **LMU Munich**, one of Europe's leading research universities. Specifically, the conference will take place in the historic **Senat Hall**, located within the main campus of LMU, Geschwister-Scholl-Platz 1/E 110, first floor.

Munich Residence
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Conference Fees and Contacts

- Author rate (maximal one paper per person)   440 €
- Non-author rate   440 €
- Extra CCIS proceedings' book copy   65 €

For your online registration, more information, and further details, please feel free to check out either:

    http://www.i4cs-conference.org/
    mailto:info@i4cs-conference.org

or directly contact the local program chair
    Sebastian Zielinski
    LMU – Lehrstuhl für Mobile und Verteilte Systeme
    Oettingenstraße 67
    80538 München, Germany

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25th International Conference

I4CS 2025 Innovations for Community Services

June 11 – 13, 2025
Munich, Germany

Conference Program

Call for Participation

Hosted by
LMU Munich

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Scientific Sessions in Detail

S1: Recognition and Verification (chair: Christian Erfurth)

Günter Fahrnberger:
A Pluggable Authentication Module for E-Mail as a Secure Additional Authentication Factor

Bhimendra Dewangan, M Srinivas, and Rbv Subramanyam:
TRYOLO: A Transformer Based Real-Time Object Detection Model for UAV Images

Patrick Seidel and Preßler Wesley:
Automated Text Classification in Maturity Models Using Transformer Architectures: An Encoder-Based Approach

S2: Computational Intelligence (chair: Gerald Eichler)

Tobias Rohe, Maximilian Balthasar Mansky, Michael Kölle, Jonas Stein, Leo Sünkel, and Claudia Linhoff-Popien:
Accelerated VQE: Parameter Recycling for Similar Recurring Problem Instances

Frank Phillipson:
Fair Benchmarking Combinatorial Optimization Solvers in the Era of Emerging Computing Paradigms

Karl-Heinz Lüke, Gerald Eichler and Denis Royer:
Artificial Intelligence Application Scenarios Considering Objective and Subjective Influence Factors for Industrial Solutions in Supply Chain Management

S3: Data Processing (chair: Jörg Roth)

Stefan Linecker, Felix Strohmeier, Christof Brandauer, and Peter Dorfinger:
Real-time Energy Data Aggregation for Energy Communities

Mario Kubek, Shiraj Pokharel, Thomas Böhme, Emma McDaniel, Herwig Unger, and Armin Mikler:
On Self-Improving Token Embeddings

Attila Papp, Udo Bub, Viivi Lähteenoja, Kai Kuikkaniemi, Marko Turpeinen, and Sami Jokela:
Data Mesh and Data Space: A Comparative Analysis with a Focus on Governance

S4: Quantum Computing (chair: Sebastian Zielinski)

Orin Pechler and Frank Phillipson:
Toward Quantum Annealing for Multi-League Sports Scheduling

Rares Adrian Oancea, Stan Van Der Linde, Willem de Kok, Matthia Sabatelli, and Sebastian Feld:
Optimizing Initial Qubit Mappings under Fixed Gate Error Rates Using Deep Reinforcement Learning

Jonas Nüßlein, Sebastian Zielinski, and Claudia Linnhof-Popien:
Learning QUBO Formulations from Data

S5: Public Sector (chair: Karl-Heinz-Lüke)

Kiana Lesan Pezeshki, Sepinood Haghighi, Farzaneh Jouyandeh, Sarvnaz Sadeghi, Pooya Moradian Zadeh, Jackie Fong, Kendall Soucie, R. Michael McKay, Kenneth K.S. Ng, Lisa A. Porter, Yufeng Tong, and Lawrence Goodridge:
A Multi-Modal Data-Driven Dashboard for Enhanced Public Health Surveillance and Awareness

Razvan Hrestic, Manfred Hofmeier, and Ulrike Lechner:
The Digital Sovereignty of the ICT Supply Chain: Demonstrating Digital Sovereignty in Real-World Scenarios

Junaeid Ahmed, Marcel Großmann, Udo Krieger, and Duy Thanh Le:
Evolution of Affordable Surveillance Systems for Patients with the Integration of Smart Health Sensors

S6: Serious Games (chair: Thomas Böhme)

Andrei-Cristian Iosif, Ulrike Lechner, and Maria Pinto-Albuquerque:
Bring Your Own Bug: Enabling User-Generated Content in Serious Games for Industrial Cybersecurity and AppSec Education

Judith Strußenberg, Karl Seidenfad, Maximilian Greiner, Kevin Riesel, Jan Biermann, and Ulrike Lechner:
From Paper to Pixel: The Digitalization of a Serious Game

Quynh-Lan Nguyen Pham, Pradipta Banerjee, and Sobah Abbas Petersen:
Cities as Innovation Ecosystems – Game to Enhance City Learning through Stakeholder Collaboration

S7: Information Security (chair: Ulrike Lechner)

Larissa Schachenhofer, Gregor Langner, Gerald Quirchmayr, Philipp Wolf, Patrick Hirsch, Stefan Schauer, Ulrike Lechner, and Günter Fahrnberger:
A Simulation-Oriented Approach to Securing Logistics Processes Based on the NIST CSF and OODA Loop

Andreas Kornmaier, Marko Hofmann, and Ulrike Lechner:
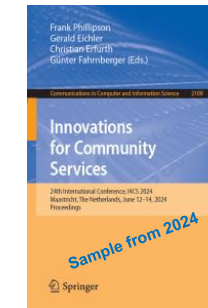**Designing and Implementing an Educational Game for Cyber Planning Building on Cyberspace's Layers**

Günter Fahrnberger, Maximilian Greiner, Stefan Hofbauer, Ulrike Lechner, Andreas Seiler, Judith Strußenberg, and Philipp Wolf:
Cybersecurity Awareness Education by Making Ransomware Tangible Securely – The Beginning

Please kindly note that this preliminary program is still subject to be adjusted on short notice. Double check regularly at our web pages.

Conference Proceedings

All accepted papers are included in the proceedings published as Vol. No. 2513 in the series Communications in Computer and Information Science (CCIS) by Springer. The 25th I4CS focuses on the well-known three key areas:

Sample from 2024

Technology:
Distributed Architectures and Frameworks

Applications:
Communities on the Move

Socialization:
Ambient Work and Living

Details at the URL: https://link.springer.com/book/9783031942624

Chairs and Committees

Steering Committee
Program Chair:
   Sebastian Zielinski, LMU, Munich, Germany
Steering Chair:
   Gerald Eichler, Deutsche Telekom, Darmstadt, Germany
Conference Chair:
   Christian Erfurth, University of Applied Sciences Jena, Germany
Publication Chair:
   Günter Fahrnberger, University of Hagen, Germany

Program Committee
   https://www.eah-jena.de/i4cs-conference/committees-and-chairs

LMU Main Building
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