

Program Overview

Tuesday, May 25, 2021

19:00 Informal Come Together with the Program Committee

Wednesday, May 26, 2021

09:00 Online Registration / Community Lounge
 09:30 Conference Opening
 09:45 **Keynote** by *Gerald Quirchmayr*: "Security, Trust and Privacy: Challenges for Community-oriented ICT Support"
 Break / Community Lounge / Warm-up
 10:45 **Session 1**: Services for Critical Infrastructure
 Break / Community Lounge
 11:15 **Session 2**: Network Architectures for Communities
 Break / Community Lounge
 13:30 **Community Session**: Hacking and Penetration Tests

Thursday, May 27, 2021

09:00 Check-in / Community Lounge
 09:30 **Invited Talk** by *Ute Schmid*: "The Third Wave of Artificial Intelligence"
 Break / Community Lounge / Warm-up
 11:00 **Session 3**: Applications and Services Supporting Work and Life
 Break / Community Lounge
 12:30 **Session 4**: Community Data and Visualization
 Break / Community Lounge
 15:30 **Community Session**: Escape Room

Friday, May 28, 2021

09:00 Check-in / Community Lounge
 09:30 **Invited Talk** by Thorsten Staake "The Use of Real-Time Feedback to Trigger Resource Conservation"
 Break / Community Lounge / Warm-up
 10:30 **Session 5**: Technology Empowers Industry Processes
 Break / Community Lounge
 12:00 **Session 6**: Future Community Support
 12:30 Awarding / Announcement of I4CS 2022 / Closing
 13:30 *All times in CEST*



Online Conference

Unfortunately, due to German federal law and the restrictions of Bavaria State, I4CS will not be able to celebrate its 2021 annual conference physically at our host, the University of Bamberg.

Therefore, the I4CS Steering Committee decided to offer an adequate online event. While scientific sessions and invited talks will be held on the university entity of **Zoom**, the community feeling will be provided with our "Community Lounge" by **wonder.me**. Both tools are hosted according to European's GDPR law.



Conference Fees and Contacts

- Online participation with an accepted paper: 150 €
- Online participation without an accepted paper: 70 €

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 conference chair

Udo R. Krieger
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 DE-96047 Bamberg, Germany
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21th International Conference

**I4CS 2021
 Innovations for
 Community Services**

May 26 – 28, 2021

ONLINE

Bamberg (virtually), Germany

Conference Program

Hosted by

Otto Friedrich University of Bamberg



Supported by



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Sessions in Detail

S1: Services for Critical Infrastructure

Günter Fahrnberger:

Threshold Pair Selection for the Reliable Condition Monitoring of Telecommunication Services

Karl Seidenfad, Tim Hoiss, and Ulrike Lechner:

A Blockchain to Bridge Business Information Systems and Industrial Automation Environments in Supply Chains

Philipp Hechenberger, Günter Fahrnberger, and Gerald Quirchmayr:

An Approach to Supporting Militia Collaboration in Disaster Relief through a Digital Environment

S2: Network Architectures for Communities

Pradeepkumar Bhale, Santosh Biswas, and Sukumar Nandi:

LIENE: Lifetime Enhancement for 6LoWPAN Network Using Clustering Approach Use case: Smart Agriculture

Hacène Fouchal:

Intermediate Pseudonym Certificate Generation for C-ITS

Niels Neumann and Frank Phillipson:

FtX Deployment using Available Networks and Existing Infrastructures

S3: Applications and Services Supporting Work and Life

Arlett Semm, Christian Erfurth, and Seyyid Uslu:

Potentials of Augmented Reality – Insights into Industrial Practice

Kathrin Kirchner and Britta Nordin Forsberg:

A Conference goes virtual: Lessons from Creating a Social Event in the Virtual Reality

Christos Mettouris, Alexandros Yeratziotis, Charalampos Theodorou, Evangelia Vanezi, Achilleas Achilleos, George Papadopoulos, Sotiria Moza, Marina Polycarpou, Joanna Starosta-Sztuczka, Karol Pecyna, Terje Grimstad, and Strahinja Lazic:

GUIDed: Assisted-Living Smart Platform & Social Communication for Older Adults

S4: Community Data and Visualization

Marius Bäsler and Manuel Bäsler:

Abusive use of distance indicators on dating platforms through trilateration

Niklas Scheidthauer, Julian Knoll, and Rainer Gross:

Visualizing Customer Journeys: How to Illustrate the entire Customer Interaction Universe of a Commercial Website in Real-time

Achilleas Achilleos, Andreas Konstantinidis, Rafael Alexandrou, Christos Markides, Effie Zikouli, and George Papadopoulos:

A Web Platform and a Context Aware Recommender System for Active Sport Events

S5: Technology Empowers Industry Processes

Karl-Heinz Lüke, Dirk Von Hugo, and Gerald Eichler:

5G Network Quality of Service Supporting Adequate Quality of Experience for Industrial Demands in Process Automation

David Gutewort, Arlett Semm, and Christian Erfurth:

Raising Awareness of SMEs for Real-Time Locating Systems (RTLS) in Intralogistics – a Workplace Learning Approach

S6: Future Community Support

Steffen Späthe and Peter Conrad:

General Requirements and System Architecture in Local Micro Smart Grid

Frank Phillipson, Tariq Bontekoe, and Irina Chiscop:

Energy Storage Scheduling a QUBO Formulation for Quantum Computing

Conference Proceedings

All accepted papers are included in the proceedings published as Vol. No. 1404 in the series Communications in Computer and Information Science (CCIS) by Springer. The 21st I4CS focuses on the following three key areas:

Technology:
Distributed Architectures and Frameworks

Applications:
Communities on the Move

Socialization:
Ambient Work and Living



I4CS Innovations for Community Systems

Chair & Committees

Steering Committee

Conference Chair:

Udo R. Krieger, Otto Friedrich University Bamberg, Germany

Steering Chair:

Gerald Eichler, Deutsche Telekom, Darmstadt, Germany

Program Chair:

Christian Erfurth, University of Applied Sciences Jena, Germany

Publication Chair:

Günter Fahrnberger, University of Hagen, Germany

Program Committee

Sebastian Apel, Technische Hochschule Ingolstadt, Germany

Amr Azzam, Cairo University, Egypt

Gilbert Babin, HEC Montréal, Canada

Gerald Eichler, Deutsche Telekom, Darmstadt, Germany

Christian Erfurth, University of Applied Sciences Jena, Germany

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Hacène Fouchal, Université de Reims Champagne-Ardenne, France

Sapna Gopinathan, Coimbatore Institute of Technology, India

Michal Hodoň, University of Žilina, Slovakia

Kathrin Kirchner, Technical University of Denmark Lyngby, Denmark

Udo R. Krieger, Otto-Friedrich University Bamberg, Germany

Peter Kropf, University of Neuchâtel, Switzerland

Ulrike Lechner, Bundeswehr University Munich, Germany

Andreas Lommatzsch, Technical University of Berlin, Germany

Karl-Heinz Lüke, Ostfalia University of Appl. Sciences Wolfsburg, Germany

Raja Natajara, Tata Institute of Fundamental Research Mumbai, India

Deveshree Nayak, University of Washington Tacoma, United States

George Angelos Papadopoulos, University of Cyprus Nikosia, Greece

Dana Petcu, West University of Timisoara, Romania

Frank Phillipson, TNO The Hague, Netherlands

Jörg Roth, Nuremberg Institute of Technology, Germany

Siddharth Swarup Rautaray, KIIT Bhubaneswar, India

Amardeo Sarma, NEC Laboratories Europe Heidelberg, Germany

Pranav Kumar Singh, IIT Guwahati and CIT Kokrajhar, India

Julian Szymański, Gdansk University of Technology, Poland

Leendert W. M. Wienhofen, City of Trondheim, Norway

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