

TECHNICAL PROGRAMME

of IEEE E-TEMS 2021

18 - 20 March 2021

Dortmund University of Applied Sciences and Arts

The conference is scheduled in accordance with
Central European Time (CET).

IEEE E-TEMS 2021-2025 is a conference series designed to look at critical and emergent issues through the lens of project, technology and engineering management. Over the course of the series, the European Partnership on Project & Innovation Management (EuroPIM) will bring research, practitioner and industry perspectives to emphasize the social accountability that must be associated with project management, digital transformation and smart cities. Each event will aim at delivering a hybrid conference model (with both virtual and in-person) and include international experts, educational workshops, doctoral symposia, poster sessions and dialogues amongst our EuroPIM partners. **IEEE E-TEMS 2021** is the first of the series and we sincerely welcome you to consider the details of this programme, how these insights can affect your research and project activities and how, most especially, you can see yourself contributing to future events.

We look forward to seeing you during the series!

Conference Core Team:



Conference Chair
Dr. Beverly Pasian



Programme Chair
Prof. Dr. Carsten
Wolff



**Conference
Manager**
M.A. Anna Badasian



Programme Manager
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- Areej Aldaghamin
- Anastasiya Kurylchik
- Kristoph Reimann
- Jorge Maldonado
- Matthias Smukal
- Thorsten Ruben

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- Alexia Nalewaik
- Anatoliy Sachenko
- Bassam Hussein
- Elena Vitkauskaite
- Galyna Tabunshchik
- Jan Fritz Rettberg
- Jose Ramon Otegi-Olaso
- Nigel Williams
- Peter Arras
- Robert Bierwolff
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- Thomas Holzmann

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- Alexia Nalewaik
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- Kevin Wittek
- Lydia Kaiser
- Markus Schmidtner
- Nerea Toledo
- Nigel Williams
- Olena Verenysh
- Peter Arras
- Rodney Turner
- Rolando Bautista Montesano
- Ruta Ciutiene
- Semih Severengiz
- Sergey Bushuyev
- Thomas Holzmann
- Uwe Grossmann

THURSDAY, 18.03.2021

- 09:30 - 10:00** Opening of the Conference
- 10:00 - 11:00** Keynote Speech
 Smart Cities: Palestinian Perspective
 (Naji Shamasna, Hadeel Jaradat, Sana Totah)
- 11:00 - 11:20** Coffee break
- 11:20 - 12:30** Session on **Projects for Smart Cities**
 (Chair: Olena Verenych)
-  **12** Empowering Citizens in a Smart City Project One Step at a Time: a Norwegian Case Study
 (Coline Senior, Mina Jowkar, Alenka Temeljotov-Salaj, Agnar Johansen)
 -  **34** Smart City Assessment: An Integrated Framework
 (Aizhan Issatayeva, Yeldos Umbetov, Daulet Abdikerim, David Tuganov, Ferhat Karaca, Ali Turkyilmaz)
 -  **39** Analysis of Potential Project Work Accidents: A Case Study of a Construction Project in Malaysia
 (Kanesan Muthusamy, Hermenth Raj Gunasegaran, Elango Natarajan, Krishnamoorthy Renganathan)
 -  **40** Smart City Replication and Group Model Building: A Conceptual Comparison
 (Patrick Ruess)
- 12:30 - 13:30** Lunch
- 13:30 - 14:00** Ideas from Dortmund: a Dialogue
 Jan Fritz Rettberg
- 14:00 - 14:30** Ideas from Trondheim: a Dialogue
 Bassam Hussein, Dirk Ahlers
- 14:30 - 15:30** Doctoral Workshop: Exploring your Journey
 (Chair: Lydia Kaiser)
-  **35** Model-based system engineering of an active, oleo-pneumatic damper for a CS-23 general aviation aircraft landing gear
 (Felix Willich)
 -  **44** Continuous validation of distributed systems and System of Systems through Model-based Systems Engineering support using the IPEK-XiL-Approach on the example of Vehicle-to-Everything
 (Moritz Wäschle)
 -  **45** Development of an assessment method for the optimisation of a portfolio of energy supply products
 (Jana Schneeloch)
 -  **46** Responsible Project Management Model for Humanitarian Projects
 (Leticia Fuentes-Ardeo)
- 15:30 - 15:40** Coffee break

- 15:40 - 16:40** Doctoral Workshop: Exploring your Journey (*continues*)
(Chair: Lydia Kaiser)
- 35** Model-based system engineering of an active, oleo-pneumatic damper for a CS-23 general aviation aircraft landing gear
(Felix Willich)
 - 44** Continuous validation of distributed systems and System of Systems through Model-based Systems Engineering support using the IPEK-XiL-Approach on the example of Vehicle-to-Everything
(Moritz Wäschle)
 - 45** Development of an assessment method for the optimisation of a portfolio of energy supply products
(Jana Schneeloch)
 - 46** Responsible Project Management Model for Humanitarian Projects
(Leticia Fuentes-Ardeo)
- 16:40 - 17:40** Panel Discussion
- Achieving Quality of Life through Projects**
(Beverly Pasion)

FRIDAY, 19.03.2021

- 09:30 - 10:00** Ideas from Bilbao: a Dialogue
■ Jose Ramon & Uxue Otegi-Olaso
- 10:00 - 11:10** Session on **Technologies for Smart Cities**
(Chair: Lydia Kaiser)
- 14** Environmental Impact of Off-grid Solar Charging Stations for Urban Micromobility Services
(Nora Schelte, Hermann Straßberger, Semih Severengiz, Sebastian Finke, Bryce Felmingham)
 - 19** Selecting Features for the Next Release in a System of Systems Context
(Carsten Wiecher, Carsten Wolff, Harald Anacker, Roman Dumitrescu)
 - 26** Smart Ticketing System for Kazakhstan Public Transport: Challenges and the Way Forward
(Malika Aitzhanova, Madina Jangelidnova, Adilkaiyr Kadyr, David Tuganov, Idriss El-Thalji, Ali Turkyilmaz)
 - 36** Shaping Smart Intermodality Between Waterborne and Landside Transport in the Coastal City of Stavanger
(Carolina Sachs, Andreia Lopes Azevedo, Mikal Dahle, Espen Strand Henriksen)
- 11:10 - 11:30** Coffee break
- 11:30 - 12:30** Workshop
■ Defining Project Analytics (Nigel Williams)
- 12:30 - 13:30** Lunch
- 13:30 - 14:00** Ideas from Lithuania: a Dialogue
■ Elena Vitkauskaite, Mantas Vilkas

- 14:00 - 14:40** Poster & Video Discussions
(Chairs: Jose Ramon Otegi-Olaso, Nigel Williams)
- 7** Opportunities and Limits in Designing an Individual Hybrid Process Model for Project Management
(Martina Königbauer)
 - 30** Project Management Time-Cost Balancing Model for Smart Cities Transformation
(Michael Dombrowski, Anatoliy Sachenko, Oleg Sachenko, Zbyshek Dombrowski)
 - 31** Analysing the Impact of Agile Project Management on Organisations
(Sascha Artelt)
 - 5** The Concept of an Educational Ecosystem for the Digital Transformation of the Ukrainian Economy
(Tetiana Kovaliuk, Nataliya Kobets)
 - 10** Networking in Smart Cities: Qualitative Analysis for the Demand-Oriented Development of a Care Platform
(Jelena Bleja, Dominik Wiewelhove, Tim Krüger, Uwe Grossmann)
 - 29** Smart Competences for Smart Citizens
(Olha Mikhieieva)
 - 13** Active History: Creating Sustainable Cities Through Heritage Trails
(Rebekah Mills)
 - 15** A Crypto-Token Based Charging Incentivization Scheme for Sustainable Light Electric Vehicle Sharing
(Kevin Wittek, Sebastian Finke, Nora Schelte, Norbert Pohlmann, Semih Severengiz)
 - 38** Agile Principles in Automotive Software Development: Analysis of Potential Levers
(Syeda Komal Anjum, Carsten Wolff)
 - 4** Holistic Concept for the Implementation of Smart Parking in Small and Medium-Sized Cities
(Kornelia Schuba, Magdalena Förster, Annika Henze-Sakowsky, Jens-Peter Seick, Martin Rabe)
 - 18** Smart Cities Using Social Cyber-Physical Systems Driven by Education
(Pedro Ponce, Juana Isabel Méndez, Adán Medina, Omar Mata, Alan Meier, Therese Peffer, Arturo Molina)
 - 21** Modelling Circularity in Bio-based Economy Through Territorial System Dynamics
(Manuel E. Morales, Stéphane Lhuillery)
 - 37** Model-based Systems Engineering of an Active, Oleo-Pneumatic Damper for a CS-23 General Aviation Aircraft Landing Gear
(Felix Willich, Carsten Wolff, Andreas Sutorma, Uwe Jahn, Merlin Stampa)
- 14:40 - 15:40** Presentation from Special Guest from IEEE TEMS (Germany Chapter)
- 7** Human interactions in a highly networked world – are human interactions facilitated with or by technology and what are the challenges?
(Thomas Holzmann)
- 15:40 - 15:50** Coffee break

- 15:50 - 17:00** Session on **Quality of Life in Smart Cities**
(Chair: Beverly Pasian)
- 1 Emergent and Unexpected Sources of Value from Radio Astronomy Projects
(Alexia Nalewaik, Nigel Williams)
 - 16 A Smooth and Accepted Transition to the Future of Cities Based on the Standard ISO 37120, Artificial Intelligence, and Gamification Constructors
(Juana Isabel Méndez, Pedro Ponce, Adán Medina, Therese Peffer, Alan Meier, Arturo Molina)
 - 25 Achieving Life in Smart Cities: Chances and Challenges for a Holistic Care Platform
(Jelena Bleja, Dominik Wiewelhove, Tim Krüger, Uwe Grossmann)
 - 27 Practical Approach for the Development of Digital Guidelines for Smart Cities
(Magdalena Förster, Martin Rabe, Arno Kühn, Roman Dumitrescu)
- 17:00 - 18:00** Panel Discussion
Unique Cultural Perspectives (Alexia Nalewaik)

SATURDAY, 20.03.2021

- 09:30 - 10:30** Keynote Speech
Australian Smart City Projects and Impacts (Arezo Shirazi)
- 10:30 - 10:40** Coffee break
- 10:40 - 11:50** Session on **Platforms for Smart Cities**
(Chairs: Peter Arras, Galyna Tabunshchik)
- 2 Collaboration for Innovation Between Universities and Smart Cities
(Claudia Doering, Markus Schmidtner, Holger Timinger)
 - 6 Case Study of University Ecosystem Development
(Oleksandr Kapliienko, Galyna Tabunshchik, Tetiana Kapliienko, Roman Shloma, Serhii Shylo)
 - 43 International Interinstitutional Coordination of Vocational Education and Training of Programmers for Industry 4.0 Needs
(Peter Kuna, Alena Hašková, Peter Arras)
- 11:50- 12:20** Ideas from Belgium: a Dialogue
Peter Arras, Dirk van Merode
- 12:20 - 13:20** Lunch
- 13:20 - 13:50** Writing a QoL Research Agenda
Beverly Pasian
- 13:50 - 14:15** Panel Discussion
What will this IEEE E-TEMS series be talking about in next 4 years?
- 14:15 - 14:45** Award session. Closure of the Conference