TECHNICAL PROGRAMME

Venue of the IEEE E-TEMS 2020: Emil-Figge-Str. 42, 44227 Dortmund, Germany

WEDNESDAY, 04.03.2020

18:00 – 21:00 Welcoming Reception **[2nd floor, hall + room A 2.03]**

THURSDAY, 05.03.2020

08:00 – 09:00 Registration **[2nd floor, hall]**

09:00 – 09:45 Opening of the conference **[2nd floor, Room A 2.02]**
  (Dr. Beverly Pasian, Conference Chair, Prof. Dr. Carsten Wolff, Programme Chair)

09:45 – 10:30 Keynote Speech **[2nd floor, Room A 2.02]**

  What Makes a City Smart? - It's not Technology
  Prof. Aaron Shenhar – (Ret'd) Rutgers University, USA
  Dr. Beverly Pasian – Utrecht University of Applied Sciences, the Netherlands

10:30 – 11:00 Coffee break **[2nd floor, Room A 2.03]**

11:00 – 12:30 Stream "Forming Digital Ecosystems" **[2nd floor, Room A 2.02]**
  Chair: Nigel Williams

  HyValue – a Hybrid Reference Model for the Automotive Product Development Process
  (Markus Schmidtner and Holger Timinger)
  An Internet of Things Platform: Information Model Approach for Agile Service Development
  in a Multi-vendor Environment
  (Shinya Toyonaga, Takahisa Suzuki and Ryuichi Matsukura)
  Framework for Business Ecosystem Roles
  (Simon Wieninger, Ruben Conrad, Maik Bittner and Amelie Wiesmann)

11:00 – 12:30 Stream "Transforming Towards Digital Cities" **[1st floor, Room A 1.02]**
  Chair: Sergey Bushuyev

  A Lightweight Message Authentication Code for Virtual Work in Future Smart Cities
  (Zahraddeen A. Pindar, Joshua O. Fayomi, Nazir H. Waziri, Bala M. Abdulhamid and
  Sapiee Jamel)
  Sustainability Ecosystems: Control of the Energy Efficiency as One of the Aspect
  of the Digital Ecosystems (Case Study for Ukraine)
  (Olena Verenych and Dmytro Hudoshnyk)
  Ambient Assisted Living – an Integral Part of Future Smart Cities
  (Jelena Bleja, Henrike Langer, Uwe Grossmann and Elisabetta Mörz)

11:00 – 12:30 Stream "Being Mobile in Smart Cities" **[3rd floor, Room A 3.03]**
        Chair: Erik Kamsties

    ■ Optimizing Bike Sharing System Flows Using Graph Mining, Convolutional and Recurrent Neural Networks
    (Davor Ljubenkov)

    ■ Smart City – Smart Logistics Amalgamation
    (Himanshu Shee, Shah Miah, Ianire Taboada and Tharaka De Vass)

12:30 – 13:30 Lunch **[Kostbar]**

13:40 – 14:25 Keynote Speech **[2nd floor, Room A 2.02]**

    ■ Developing Responsible Project Professionals: Research and Teaching Perspectives
    (Dr. Nigel Williams - University of Portsmouth, UK)

14:30 – 15:30 Stream "Achieving Smart Cities through Projects" **[3rd floor, Room A 3.03]**
        Chair: Jose Ramon Otegi

    ■ Patterns for International Cooperation between Innovation Clusters. Cases of CFAA and ruhrvalley
    (Edwar Leonardo Sastoque Pinilla, Stefanie Bengfort, Nargiza Mikhridinova, Norberto López de Lacalle, Carsten Wolff and Nerea Toledo Gandarias)

    ■ Emotional Infection of Management Innovation SMART Government Projects
    (Sergey Bushuyev, Jahid Babayev, Denis Bushuiev and Boris Kozyr)

14:30 – 15:30 Workshop **[2nd floor, Room A 2.02]**

    ■ Rethinking Project Management: Embedding a Responsibility Perspective into Research and Teaching in Project Management"
    (Dr. Nigel Williams)

15:30 – 16:15 Coffee Break + Poster Session **[2nd floor, Room A 2.03 + 3rd floor, hall]**

16:20 – 17:20 Workshop **[2nd floor, Room A 2.02]**

    ■ Rethinking Project Management: Embedding a Responsibility Perspective into Research and Teaching in Project Management"
    (Dr. Nigel Williams)

18:00 – 19:30 City Tour around Dortmund **[2nd floor, hall]**

FRIDAY, 06.03.2020

08:00 – 09:00 Registration **[2nd floor, hall]**

09:00 – 09:45 Keynote Speech **[2nd floor, Room A 2.02]**

Smart Urbanism in Older Cities
(Dr. Alexia Nalewaik - American University, USA)

09:45 – 10:45 Stream "Training and Educating" **[2nd floor, Room A 2.02]**
Chair: Peter Arras

Cluster Model of IT Education in Ukraine
(Tetiana Kovaliuk and Nataliya Kobets)

Are Cities Smart to Blend Learning? A Framework for Language Course Development at Master Level Programs in Dortmund
(Yelena Dyan, Nargiza Mikhridinova and Andre Dechange)

09:45 – 10:45 Stream "Achieving Smart Cities through Projects" **[1st floor, Room A 1.02]**
Chair: Alexia Nalewaik

Proactive Project Management as a Discrete Event System
(Michael Dombrowski, Anatoliy Sachenko, Zbyshek Dombrowski and Oleg Sachenko)

A Retrospective Analysis of the Role of Soft Factors in Digitalization Projects: Based on a Case Study in a Public Health Organization in Trondheim-Norway
(Bertha Ngereja, Bassam Hussein, Kristin Helene Jørgensen Hafseld and Carsten Wolff)

09:45 – 10:45 Stream "Engineering Smart Cities" **[3rd floor, Room A 3.03]**
Chair: Lydia Kaiser

Cost Optimization Simulation for Electric Vehicle Charging Infrastructure
(Peter Arras, Galyna Tabunshchyk, Sergiy Korotunov, Vyacheslav Okhmak)

Implementing Building Information Modelling for the Reconstruction Process of Unfinished Building Projects
(Tetiana Lukianova, Vasyl Donenko and Ralf Klein)

10:45 – 11:15 Coffee break **[2nd floor, Room A 2.03]**

11:15 – 12:15 Stream "Training and Educating" **[2nd floor, Room A 2.02]**
Chair: Peter Arras

Insights on Using Project-Based Learning to Create an Authentic Learning Experience of Digitalization Projects
(Bassam Hussein, Bertha Ngereja, Kristin Helene Jørgensen Hafseld and Nargiza Mikhridinova)

Investigation and Development of Demonstration System for Training in the Field of Home Automation
(Artem Tulenkov, Anzhelika Parkhomenko, Yevhenii Yaremchenko, Aleksandr Sokolyanskii, Yaroslav Zalyubovskiy, Marina Kalinina, Andriy Parkhomenko, Aleksandr Stepanenko and Maksym Andreiev)

11:15 – 12:15 Stream "Achieving Smart Cities through Projects" **[1st floor, Room A 1.02]**
        Chair: Alexia Nalewaik

    A Retrospective on Agile Transformations: Survey Results on Agility of German Organisations
(Olha Mikhieieva and Stephan Klaus)

    Sustainable City Based on Stakeholders Co-Creation: the ELISE Case Study
(Ruta Ciutiene, Zaneta Stasiskiene, Evelina Meiliene and Lolita Jurksiene)

11:15 – 12:15 Stream "Engineering Smart Cities" **[3rd floor, Room A 3.03]**
        Chair: Lydia Kaiser

    Predicting Subcontractor Performance from Past Audits
(Laurent Mertens and Joost Vennekens)

    Decision Support System with K-means Clustering Algorithm for Detecting the Optimal Store Location Based on Social Network Events
(Mohamed Ahmed Hamada, Lyazat Naizabayeva)

12:30 – 13:30 Lunch **[Kostbar]**

13:40 – 14:25 Keynote Speech **[2nd floor, Room A 2.02]**

    Digital Transformation: Between Everyday Life and the Dependence on Smart IT Systems
(Dr. Thomas Holzmann - IEEE TEMS Germany Chapter, Germany)

14:30 – 15:30 Stream "Being Mobile in Smart Cities" **[1st floor, Room A 1.02]**
        Chair: Andrea Kienle

    A Novel Education Program Using Autonomous Ground Vehicles to Develop STEM Skills
(Rolando Bautista-Montesano, Carlos Rogel-Hurtado, Gabriela Arzate-Bello and Pedro Ponce-Cruz)

    Life Cycle Assessment on the Mobility Service e-scooter Sharing
(Semih Severengiz, Sebastian Finke, Nora Schelte and Norman Wendt)

14:30 – 15:30 Unique Perspectives: EuroPIM networking event **[3rd floor, Room A 3.03]**

14:30 – 15:30 Workshop **[2nd floor, Room A 2.02]**
        Quality of Life in Smart Cities: How can Projects Deliver"
        (Dr. Beverly Pasian)

15:30 – 16:15 Coffee Break + Poster Session **[2nd floor, Room A 2.03 + 3rd floor hall]**

16:20 – 17:20 Workshop **[2nd floor, Room A 2.02]**
        Quality of Life in Smart Cities: "How Can Projects Deliver"
        (Dr. Beverly Pasian)

16:20 – 17:20 Unique Perspectives: EuroPIM networking event **[3rd floor, Room A 3.03]**

19:00 Conference Dinner. Restaurant "Mama Mia" **[Chemnitzer Str. 38, 44139 Dortmund]**

ETEMS 2020

SATURDAY, 07.03.2020

08:00 – 09:00 Registration **[2nd floor, hall]**

09:00 – 09:45 Keynote Speech **[2nd floor, Room A 2.02]**

Dortmund Smart City Alliance
(Dr. Jan Fritz Rettberg - Smart City Dortmund, Germany)

09:45 – 10:45 Stream "Forming Digital Ecosystems" **[2nd floor, Room A 2.02]**
Chair: Cristian Reimann

An SSI Based System for Incentivized and Self-determined Customer-to-Business
Data Sharing in a Local Economy Context
(Kevin Wittek, Laura Lazzati, David Bothe, Ann-Julie Sinnaeve and Norbert Pohlmann)

The Digital Stadium – from Future Scenarios to Technology and Business Model
Development
(Christoph Jürgenhake, Harald Anacker and Roman Dumitrescu)

09:45 – 10:45 Stream "Transforming Towards Digital Cities" **[1st floor, Room A 1.02]**
Chair: Beverly Pasian

Critical Success Factors for the Implementation of Building Information Modeling (BIM)
among Construction Industry Development Board (CIDB) G7 Contractors
in the Klang Valley, Malaysia
(Kanesan Muthusamy and Leopold Chew)

Smart Cities for Everyone – Age and Gender as Potential Exclusion Factors
(Jelena Bleja, Henrike Langer, Uwe Grossmann and Elisabetta Mörz)

10:45 – 11:15 Coffee break **[2nd floor, Room A 2.03]**

11:15 – 12:15 Stream "Training and Educating" **[2nd floor, Room A 2.02]**
Chair: Galyna Tabunshchyk

ParSimTech Research and Training Center
(Oleksandr Miroshkin, Sergiy Kovalov, Olga Dmitrieva, Oleksandr Shcherbakov, Serhii
Tsololo, Yuliia Dikova, Sergiy Gogolenko, Volodymyr Kushnarenko and Volodymyr Svyatnyy)

Case Study "Automation System for Mine Drainage Unit"
(Anna Voropaeva, Hlib Stupak, Victoriya Voropayeva and Valerii Potsepaiev)

12:15 – 13:30 Lunch **[2nd floor, Room A 2.03]**

13:30 – 14:15 Panel Session "What will this IEEE series be talking about in 2025" **[2nd floor, Room A 2.02]**
(Dr. Beverly Pasian)

14:15 – 15:00 Smart City Research Collaboration Workshop [**2nd floor, Room A 2.02**]
(Prof. Dr. Tamara Appel)

15:00 – 15:30 Announcement of Conference Series Smart City Research Agenda **[2nd floor, Room A 2.02]**
(Dr. Beverly Pasian and Prof. Dr. Carsten Wolff)

15:30 – 16:15 Closure of the Conference **[2nd floor, Room A 2.02]**

Poster Session

3rd floor hall
Thursday, 05.03.2020 – Friday, 06.03.2020

Development of Approaches of Data Science Tools Applying for Successful Smart City Project Management
(Nataliia Yehorchenkova, Oleksii Yehorchenkov, Yevheniia Kataiva, Kychan Olga, Serhii Mitsenko and Svitlana Polishchuk)

New Trends in Engineering Smart Cities in Ukraine
(Ahmed M. A. Moustafa Hassan and Vasyl Donenko)

Investigation and Development of Traffic Light Control System Prototype for Serious Game
(Ernest Gunko, Olga Gladkova and Anzhelika Parkhomenko)

Modern Approach to the Road Traffic Management in Cities of Ukraine: Case Study of Kyiv Municipal Company "Road Traffic Management Center"
(Victor Cherniy, Sergiy Bezshapkin, Olena Verenych, Ihor Vasyliev and Olena Sharovara)

Decision-Making Information System and Forecasting of Ecological Safety on Land
(Lyazat Naizabayeva, Gulzat Turken and Chingis Nurzhanov)

Developing Future Teachers' Digital Culture: Challenges and Perspectives
(Yerkinay Yelubay, Lazzat Seri, Dina Dzhussubaliyeva and Ulzharkin Abdigapbarova)

The Internet of Things Solutions in the Investigation of Urban Passenger Traffic and Passenger Service Quality
(Oleg Sokulskyi, Kateryna Hilevska, Viktor Chumakevych, Vadym Ptashnyk, Anatoliy Tryhuba and Anatoliy Sachenko)