

Session Program

Jul 7 - 11, 2025



AESOP ANNUAL CONGRESS 2025

T_11 EMERGING TECHNOLOGIES

Yildiz Technical University, Istanbul
Çifte Havuzlar, YTÜ-Davutpaşa Kampüsü, 34220 Esenler/İstanbul, Türkiye

Tue, July 8

11:00 AM

T_11 EMERGING TECHNOLOGIES: Artificial Intelligence S1

Session | **Location:** YTU Davutpasa Campus, A1-05 | **Conveners:**
Prof. Fatih Terzi, Michele Campagna, Merve Deniz Tak

11:00 - 11:10 AM

Using artificial intelligence to analyse the role of multi-level strategic spatial planning in the development of operational landscapes

Speaker

Dr Simona R Gradinaru

11:10 - 11:20 AM

Reframing Urban Narratives: AI, Digital Innovation, and the Role of Intelligent Adaptation in Just and Equitable Planning

Speaker

Dr Denis Maragno

11:20 - 11:30 AM

PC-GAN: A Hybrid Pix2pix-CycleGAN Framework for Low-Carbon Urban Morphology Optimization

Speaker

Mr Tao Wu

11:30 - 11:40 AM

Using Social Media Big Data and ChatGPT for Identifying Counter-Urbanisation Hot Spots in China

Speaker

Mr Jian Chen

11:40 - 11:50 AM

Unraveling the Complexity of Urban Functional Organization Based on Explainable GeoAI

Speaker

Mr Xinzhuo Zhao

11:50 AM - 12:00 PM

Towards a Domain specific LLM for Sustainable Urban Development: Extracting Research trends and topics from Text Data

Speakers

Agota Barabas, Husain Vaghjipurwala

12:30 PM

2:00 PM

T_11 EMERGING TECHNOLOGIES: L2 - Digital Transformation

Session | **Location:** YTU Davutpasa Campus, A1-05 | **Conveners:** Merve Deniz Tak, Michele Campagna

2:00 - 2:10 PM

Digitalization, Culture, and Urban Space Interaction: A Design Fiction Approach

Speaker

Ms Zeynep Gülce Aydın

2:10 – 2:20 PM

A Digitalised Tourism Sector: Impact on Occupations and Geographies**Speakers**

Balázs Cserpes, Rachele Vanessa Gatto

2:20 – 2:30 PM

The Impact of Environmental Design Elements on Corporate Site Selection for Information Industry Companies in the Metaverse**Speaker**

Mr Yılma KARATUNA

2:30 – 2:40 PM

Unraveling the relationship between the digital platforms and gentrification: Evidence from Nanjing, China**Speaker**

Qianhui He

2:40 – 2:50 PM

Effective Monitoring and Evaluation for Digital Twins**Speaker**

Dr William Hynes

3:30 PM

4:00 PM

T_11 EMERGING TECHNOLOGIES: L3 - Digital Twins**Session** | **Location:** YTU Davutpasa Campus, A1-05 | **Convener:** Prof. Fatih Terzi

4:00 – 4:10 PM

Urban Digital Twins for Cities in Transition: A Literature Review on Current Applications and Future Perspectives**Speaker**

Pietro Legnani

4:10 – 4:20 PM

Mobility Digital Twin for Public Transportation Planning: Addressing the Challenges of Depopulation and Aging**Speaker**

Dr Jue Ma

4:20 – 4:30 PM

Towards Drone-Based 3D City Information Modeling for Urban Analysis and Planning**Speaker**

Mr Abdalrahman T. Y. Alashi

4:30 – 4:40 PM

3D Simulations of Urban Planning Regulations: Assessing Regulatory Impacts on Densification and Urban Expansion**Speaker**

Dr somaie Abolhasani

5:30 PM

Wed, July 9

11:00 AM

T_11 EMERGING TECHNOLOGIES: L4 - Geodesign

Session | **Location:** YTU Davutpasa Campus, A1-05 | **Convener:** Prof. Fatih Terzi

11:00 - 11:10 AM

The digital transformation of planning: how data and algorithms are changing spatial planning practice

Speaker

Prof. Anna M. Hersperger

11:10 - 11:20 AM

Geodesign for climate neutrality: contributing to Regional Climate Adaptation Strategies in Italy.

Speakers

Simone Corrado, Prof. Francesco Scorza

11:20 - 11:30 AM

Geodesign as a Framework for the Green Transition of University Campuses: Case Studies from University College Dublin and Aarhus University

Speaker

Dr Chiara Cocco

11:30 - 11:40 AM

Supporting collaborative scenario-building in land use and transport planning: An evaluation of the SIM4PLAN tool.

Speaker

Dr Julio A. Soria-Lara

11:40 - 11:50 AM

A multiscale spatial approach to Climate Planning

Speaker

Prof. Michele Campagna

11:50 AM - 12:00 PM

Advanced Quantification of Urban Complexity and Adaptive Capacity: Sub-Fractal Analysis and Spatial Statistics in İzmir

Speaker

Prof. EMİNE YETİŞKUL ŞENBİL

12:30 PM

4:30 PM

T_11 EMERGING TECHNOLOGIES: Artificial Intelligence S2

Session | **Location:** YTU Davutpasa Campus, A1-05 | **Convener:** Merve Deniz Tak

4:30 - 4:40 PM

Information science, digital modelling and the legacy of the engineering mindset in planning thought

Speaker

Giulia Guadagnoli

4:40 - 4:50 PM

AI-Empowered Research on Healthy Streets: An Iterative Path of Streetscape Perception, Evaluation, and Optimization

Speaker

Mr Yinqi Yu

4:50 - 5:00 PM

Intelligent Urban Design: Self-organized Block Form Generation Using Reinforcement Learning—An Empirical Study from Nanjing, China

Speaker

Yuyue HUANG

5:00 - 5:10 PM

AI-Driven Multimodal Data Fusion for Automated Ontology Construction: Methods and Smart Manufacturing Case Study

Speaker

Ms Rui JIANG

6:00 PM

Thu, July 10

9:00 AM

T_11 EMERGING TECHNOLOGIES: Artificial Intelligence S3

Session | **Location:** YTU Davutpasa Campus, A1-05 | **Convener:** Michele Campagna

9:00 – 9:10 AM

Identification of potential regeneration areas in urban residential districts using multi-source big data and GeoAI

Speaker

Dr Wenzhu Li

9:10 – 9:20 AM

Geographically weighted machine learning for modeling spatial heterogeneity in off-campus student housing rents

Speaker

Mr Shih-Hung Yang

9:20 – 9:30 AM

Towards Ethical Implementation of Urban Digital Twins: Addressing Key Challenges and Recommending Best Practices

Speaker

Dr Mani Dhingra

9:30 – 9:40 AM

A Data-Driven Framework for Enhancing First-and-Last-Mile Connectivity in Bicycle-Metro Integration Systems: Based on Dockless Shared Bicycle Data in Shanghai, China

Speakers

Ms Jiaming XING, Mr Yuxuan WANG, Mr Yuhao SHI, Ms Jinghao HEI

10:30 AM

11:00 AM

T_11 EMERGING TECHNOLOGIES: Serious Games

Session | **Location:** YTU Davutpasa Campus, A1-05 | **Convener:** Michele Campagna

11:00 – 11:10 AM

Teaching planning cultures? Planning games for intercultural learning across borders

Speaker

Mrs Hélène Rouchet

11:10 – 11:20 AM

Motivational Affordances of Gamified Participatory Experiences

Speaker

Mrs Çisem Yaşın

11:20 – 11:30 AM

Emerging Tools for Urban Climate Governance: Decoding Public Participation in Serious Games

Speaker

Ms Melike Şengül

11:30 - 11:40 AM

Intersection of Digital and Physical: Phygital Urban Public Spaces

Speaker

Ms Berna Gürkan

11:40 - 11:50 AM

A Preliminary Research on Innovative Communication Mediums of Design in Participatory Planning and Community Design

Speaker

Dr YING-FEN CHEN

12:30 PM

Fri, July 11

9:00 AM

T_11 EMERGING TECHNOLOGIES: Virtual Reality

Session | **Location:** YTU Davutpasa Campus, A1-05 | **Convener:** Merve Deniz Tak

9:00 – 9:10 AM

Testing Virtual Reality to communicate long-term scenarios in participatory planning processes

Speaker

Valentina Inés Tagliari

9:10 – 9:20 AM

Integrating Mixed Reality and Large Vision Models to Measure Multi-Dimensional Urban Green Perception

Speaker

Dr YUEHAO CAO

9:20 – 9:30 AM

Augmented Reality for Community-based Collaborative Urban Design: A Case Study of RWTH Aachen University Campus Transformation

Speaker

Liyuan Ma

9:30 – 9:40 AM

“Love the Specific Scene of Life”: A Visual Analysis of User-Generated Narratives on Walkable City Spaces

Speaker

Izzy Yi JIAN

9:40 – 9:50 AM

Visual perception and preference analysis of riverfront mountain landscapes in mountainous cities: A study based on user-generated image data

Speaker

Ms Lingna Zhu

10:30 AM

11:00 AM

T_11 EMERGING TECHNOLOGIES: Smart Cities | Social Media

Session | **Location:** YTU Davutpasa Campus, A1-05 | **Convener:** Prof. Fatih Terzi

11:00 – 11:10 AM

Smart City Imaginaries: A Theoretical Framework for Socio-Technical-Spatial Analysis

Speaker

SaeBom Song

11:10 – 11:20 AM

“UBT SMART City” Model as a Testbed for Emerging Digital Technologies and Transformative Urban Planning

Speaker

Edmond Hajrizi

11:20 - 11:30 AM

Unpacking the Black Box: How does the WeChat application reshape digitally enhanced collaborations between planning practitioners in China?

Speaker

Prof. Joon Sik Kim

11:30 - 11:40 AM

Monitoring the Impact of Urban Regeneration on Green Infrastructure: Istanbul Case

Speaker

Ayşe Velioğlu

11:40 - 11:50 AM

Harnessing Smart Technologies in Real Estate: A New Paradigm for Spatial Planning and Urban Development

Speaker

Mr Tarek Al-Rimawi

12:30 PM