**Session Program**

**7–11 Jul 2025**



# AESOP ANNUAL CONGRESS 2025

# EMERGING TECHNOLOGIES

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

# Tuesday 8 July

**11:00**

## EMERGING TECHNOLOGIES: L1 - Artificial Intelligence S1
**Session** | **Location:** YTU Davutpasa Campus, A1-05 | **Conveners:**
Prof. Fatih Terzi, Michele Campagna, Merve Deniz Tak

### 11:00–11:10
**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
**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
**PC-GAN: A Hybrid Pix2pix-CycleGAN Framework for Low-Carbon Urban Morphology Optimization**

**Speaker**

Mr Tao Wu

### 11:30–11:40
**Using Social Media Big Data and ChatGPT for Identifying Counter-Urbanisation Hot Spots in China**

**Speaker**

Mr Jian Chen

### 11:40–11:50
**Unraveling the Complexity of Urban Functional Organization Based on Explainable GeoAI**

**Speaker**

Mr Xinzhuo Zhao

### 11:50–12:00
**Towards a Domain specific LLM for Sustainable Urban Development: Extracting Research trends and topics from Text Data**

**Speakers**

Agota Barabas, Husain Vaghjipurwala

**12:30**

**14:00**

## EMERGING TECHNOLOGIES: L2 - Digital Transformation
**Session** | **Location:** YTU Davutpasa Campus, A1-05 | **Conveners:** Merve Deniz Tak, Michele Campagna

### 14:00–14:10
**Digitalization, Culture, and Urban Space Interaction: A Design Fiction Approach**

**Speaker**

Ms Zeynep Gülce Aydın

**14:10–14:20** A Digitalised Tourism Sector: Impact on Occupations and Geographies

**Speakers**

Balázs Cserpes, Rachele Vanessa Gatto

**14:20–14:30**

**Sensing the Cities: Repurposing Open-Source Image Datasets for Urban Analytics**

**Speaker**

Chhavi Arya

**14:30–14:40**

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

**Speaker**

Mr Yılma KARATUNA

**14:40–14:50**

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

**Speaker**

Qianhui He

15:30

16:00

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

**16:00–16:10**

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

**Speaker**

Pietro Legnani

**16:10–16:20** Effective Monitoring and Evaluation for Digital Twins

**Speaker**

Dr William Hynes

**16:20–16:30**

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

**Speaker**

Dr Jue Ma

**16:30–16:40**

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

**Speaker**

Mr Abdalrahman T. Y. Alashi

**16:40–16:50**

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

**Speaker**

Dr somaie Abolhasani

17:30

# Wednesday 9 July

11:00

## EMERGING TECHNOLOGIES: L4 - Geodesign
**Session** | **Location:** YTU Davutpasa Campus, A1-05 | **Convener:** Prof. Fatih Terzi

**11:00–11:10**

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

**Speaker**

Prof. Anna M. Hersperger

**11:10–11:20**

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

**Speakers**

Simone Corrado, Prof. Francesco Scorza

**11:20–11:30**

### 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**

### 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** **A multiscale spatial approach to Climate Planning**

**Speaker**

Prof. Michele Campagna

12:30

16:30

## EMERGING TECHNOLOGIES: L5 - Artificial Intelligence S2
**Session** | **Location:** YTU Davutpasa Campus, A1-05 | **Convener:** Merve Deniz Tak

**16:30–16:40**

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

**Speaker**

Giulia Guadagnoli

**16:40–16:50**

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

**Speaker**

Mr Yinqi Yu

**16:50–17:00**

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

**Speaker**

Yuyue HUANG

**17:00–17:10**

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

**Speaker**

Ms Rui JIANG

18:00

# Thursday 10 July

09:00

## EMERGING TECHNOLOGIES: L6 - Artificial Intelligence S3
**Session** | **Location:** YTU Davutpasa Campus, A1-05 | **Convener:** Michele Campagna

**09:00–09:10**

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

**Speaker**

Dr Wenzhu Li

**09:10–09:20**

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

**Speaker**

Mr Shih-Hung Yang

**09:20–09:30**

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

**Speaker**

Dr Mani Dhingra

**09:30–09:40**

### 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

11:00

## EMERGING TECHNOLOGIES: L7 - Serious Games
**Session** | **Location:** YTU Davutpasa Campus, A1-05 | **Convener:** Michele Campagna

**11:00–11:10**

### Teaching planning cultures? Planning games for intercultural learning across borders

**Speaker**

Mrs Hélène Rouchet

**11:10–11:20**    **Motivational Affordances of Gamified Participatory Experiences**

**Speaker**

Mrs Çisem Yaşin

**11:20–11:30**

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

**Speaker**

Ms Melike Şengül

**11:30–11:40**    **Intersection of Digital and Physical: Phygital Urban Public Spaces**

**Speaker**
Ms Berna Gürkan

11:40–11:50

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

**Speaker**
Dr YING-FEN CHEN

12:30

# Friday 11 July

09:00

## EMERGING TECHNOLOGIES: L8 - Virtual Reality
**Session** | **Location:** YTU Davutpasa Campus, A1-05 | **Convener:** Merve Deniz Tak

09:00–09:10

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

**Speaker**

Valentina Inés Tagliari

09:10–09:20

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

**Speaker**

Dr YUEHAO CAO

09:20–09:30

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

**Speaker**

Liyuan Ma

09:30–09:40

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

**Speaker**

Izzy Yi JIAN

09:40–09:50

### 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

11:00

## EMERGING TECHNOLOGIES: L9 - Smart Cities | Social Media
**Session** | **Location:** YTU Davutpasa Campus, A1-05 | **Convener:** Prof. Fatih Terzi

11:00–11:10

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

**Speaker**

SaeBom Song

11:10–11:20

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

**Speaker**

Prof. Joon Sik Kim

**11:20–11:30**

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

**Speaker**

Ayşe Velioğlu

**11:30–11:40**

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

**Speaker**

Mr Tarek Al-Rimawi

12:30