



# PRO-VE 2025

26th IFIP/SOCOLNET Working Conference on Virtual Enterprises  
Hybrid Human-AI Collaborative Networks

## PRO-VE 2025 Special Session

### Urban Digital Twins for Collaborative Resilience and Sustainability

#### Scope

As global urbanization accelerates, urban areas face significant pressure on service systems. This pressure is further exacerbated by the urgent need to address climate change and mitigate urban vulnerabilities to crises such as pandemics and geopolitical conflicts. To enhance urban resilience and sustainability, Urban Digital Twins (UDTs) have emerged as a promising tool. UDTs, virtual replicas of territories, integrate complex data from multiple sectors and enable the simulation of scenarios to optimize urban and peri-urban planning and decision-making. As systems become increasingly intelligent and interconnected, it is essential to explore and foster collaboration among the various urban systems and reflect this in the UDT models.

This session aims at capturing a comprehensive landscape of the current state-of-the-art in collaborative UDTs and discuss ground-breaking advances in developing and applying UDTs to improve community resilience and sustainability. Given the interdisciplinary nature of current scientific and technical innovations, we welcome contributions from a wide range of fields, including (but not limited to): Smart Cities, Intelligent Transportation, Collaborative Ecosystems, Behavioural Change, Software Engineering, Computational modelling, Decision-making, Urban Development Planning, Climate resilience, Urban Sustainability, etc.

#### Session Organizers

- Mamadou Kaba TRAORE, University of Bordeaux, [mamadou-kaba.traore@u-bordeaux.fr](mailto:mamadou-kaba.traore@u-bordeaux.fr)
- Raymond HOUE, University of Technology Tarbes Occitanie Pyrénées, [raymond.houe-ngouna@uttop.fr](mailto:raymond.houe-ngouna@uttop.fr)

#### Topics/ Keywords

Authors can propose recent advances on topics that include, but are not limited to:

- Collaborative modelling for UDT.
- Data aspects: quality, semantics, etc.
- Digital intelligent urban services.
- Engineering techniques and tools for UDT.
- UDT performance and metrics.
- Collaborative strategies for community resilience/sustainability.
- Human-centric intelligent UDTs.

#### Submission procedure

The special sessions is included in the main Conference and follow the same reviewing process.

- 1 Mar 2025 - Special session proposal
- 11 Apr 2025 - Abstract submission (optional)
- 9 May 2025 - Full paper submission
- 20 Jun 2025 - Results notification
- 4 Jul 2025 - Camera-ready version
- 27-29 October, 2025 - Conference

Acceptance of papers is based on the **full paper** (up to **14** pages). Each paper will be evaluated by three members of the International Program Committee.

When submitting on the web site, you have to indicate the name of the special session.

Submission procedure via EasyChair available on: <http://www.pro-ve.org>, with copy by email to the chairs of the special session.

Sponsorship will be requested from IEEE and ACM