# 21<sup>st</sup> ITS Symposium 2023 7-8 December, 2023



Toyama International Conference Center <a href="https://www.ticc.co.jp/english/">https://www.ticc.co.jp/english/</a>

# **Call for Papers**

The declining population that rural areas are facing has reduced the convenience of local public transportation, medical care, and other daily life services that are essential to people's lives, and the infrastructure of these services is in danger of collapsing. In particular, regional public transportation is expected to face difficulties in sustaining itself, due to the population decline as well as the anticipated deterioration of the business situation in the Corona disaster. Drastic measures need to be strengthened to ensure the local transportation, which is essential for commuting to school, shopping, and access to medical and welfare facilities.

In order to overcome these challenges, the Digital Rural City State Concept has been proposed, in which data collaboration infrastructure and digital technology will play a central role. The realization of such concepts as smart cities, "digi-katsu" mountainous regions, SDGs future cities, and carbon-free regions is expected through job creation, improvement of livelihood and sustainability, and increase in wellbeing in rural areas.

Toyama City, which is leading the way with its compact city strategy, is aiming to realize a walkable city by rethinking its overly cardependent lifestyle through the conversion of the former JR Toyama Port Line to LRT, the realization of a loop line for city trains, and the formation of a transportation network with LRT at its core, including a north-south connection, and is also aiming to create a new city with a compact city strategy by combining the opening of the Hokuriku Shinkansen line with the development of a single district around Toyama Station. In conjunction with the opening of the Hokuriku Shinkansen line, the city is promoting integrated urban development in the area surrounding Toyama Station. We would like to discuss with symposium participants the role of ITS in supporting sustainable and vibrant urban development in Toyama, an SDGs future city that is promoting various initiatives despite being a regional city, in order to improve the quality of real mobility in the next generation through digital utilization.

The Program Committee invites ITS researchers and practitioners to submit a paper to be considered for presentation and publication at the 21st ITS Symposium 2023. The Committee offers two options, submitting a full paper or submitting an abstract. Full papers will go through the journal's standard peer-review process and, if accepted for publication, will be included in *International Journal of Intelligent Transportation Systems Research (IJIT)*\*.

\* International Journal of Intelligent Transportation Systems Research: https://www.springer.com/journal/13177

#### **SUBMISSION INSTRUCTIONS**

# FULL PAPER SUBMISSION (PEER-REVIEW PROCESS)

- Authors are requested to submit a paper by 1 June, 2023.
- The official language of papers is **English only**. A maximum length is 10 pages of A4-size paper.

  Templates can be downloaded at <a href="https://www.its-jp.org/katsudou/its-symposium/21st2023/cfp/">https://www.its-jp.org/katsudou/its-symposium/21st2023/cfp/</a>
- Login as an author to the IJIT website <a href="http://www.editorialmanager.com/ijit/">http://www.editorialmanager.com/ijit/</a>. Choose "ITS Symposium" from the pull-down menu of Article Type.
- In principle, the journal publication decision will be made by **the end of October 2023**. Even if a decision has not been made at this point, it is still able to remain in the review process and the paper can be published at the later issues.
- The accepted papers will be included into regular issues of the IJIT, and it is expected to be published by **the end of December**. No fees are charged to the contributors.
- Regardless of the publication status, authors will be required to make a presentation in the Symposium.

  To avoid submission conflicts with the IJIT, the symposium will post Preprint of the submitted papers on the web proceedings provided for registrants.

# **ABSTRCT SUBMISSION (ABSTRACT REVIEW PROCESS)**

- Authors are requested to submit an abstract by 21 August, 2023.
- The language of abstracts should be Japanese or English. Expected volume is 250 characters in Japanese or 100 words in English.
- Access <a href="https://www.its-jp.org/katsudou/its-symposium/21st2023/cfp">https://www.its-jp.org/katsudou/its-symposium/21st2023/cfp</a>/ to register abstract with the paper information.
- Authors are notified of the publication decision by the end of September 2022.

• If an abstract has been accepted, the author will be requested to submit the final paper by **6 November, 2023**. The papers will be posted on the web proceedings provided for registrants.

In human subjects research, you must respect the dignity and human rights of research subjects, and consider their life, health, and safety. Data and information pertaining to the subjects must be handled appropriately and their privacy must be protected. Informed consent must be obtained from the subjects. In addition, you need to obtain approval from the ethics committee of the institution you belong to before planning and conducting the research.

#### **IMPORTANT DATES**

#### **FULL PAPER SUBMISSION**

Submission Deadline
 First Notification
 Revision Submission
 Journal Acceptance Notice
 Publication in IJIT
 June
 End of July
 End of August
 In order of acceptance

Publication in Preprint
 27 November

#### **ABSTRACT SUBMISSION**

Submission Deadline
 21 August

Acceptance Notice End of SeptemberFinal Paper Submission Deadline 6 November

Presentation Submission Deadline Middle of November

Publication in Proceedings 27 November

# **REGISTRATION FEES**

Туре	To 30 November, 2022		From 1 December, 2022	
	Member	Non-Member	Member	Non-Member
Speaker	¥15,000			
Delegate	¥15,000	¥20,000	¥18,000	¥23,000
Student Speaker	¥8,000			
Student Delegate	¥3,000			

# **AREA COVERED**

# A. Challenges and Opportunities of Big Open Data

- Open data management and application
- Data sharing and exchange
- Ubiquitous sensing
- Technology for data collection
- Availability and quality of data
- Data visualisation
- Data fusion
- Predictive analytics
- New business models for traveller information
- Security in an open environment

#### B. Smart Cities and New Urban Mobility

- Integrated transport system
- Next generation traffic management
- Transport modelling
- Road user charging
- Travel demand management
- Integrated ticketing and payment
- Incident management

#### C. Automated Vehicles and Cooperative ITS

- V2X Communication technologies and Cooperative systems
- Human factors and human machine interface
- Field operational tests, pilots and demonstrations
- Positioning, mapping and navigation
- Security and integrity for connected and automated vehicles
- Mobility as a service a transport revolution?
- Infrastructure and regulation needs for a mixed-capability fleet

# D. Mobile Applications

- Multi modal real time information
- Multi modal journey planner
- Demand responsive public transport
- Taxi and parking reservation
- Real time traffic advisory

# E. Vehicle and Network Safety

- Speed advice and restriction
- Technology and system for safety and enforcement
- Advanced driver assistance and support systems
- Human factors
- Emergency pre-emption and notification
- Post-crash response
- Improving safety of vulnerable road users
- e-call
- Roadwork safety and inclement weather management
- Preventative and active safety systems

# F. Future Freight including Aviation and Maritime

- Freight and fleet management
- Logistics
- Railway network operation
- Unmanned aerial vehicles (UAS / RPAS / Drones)

#### G. Environmental Sustainability

- Environmental impact reduction
- Electro mobility and charging
- Eco driving
- Reducing noise
- Car sharing, bicycle sharing and ride sharing
- Encouraging active transport and mode shift

# 21st ITS Symposium 2023

# Hosted by ITS Japan

#### Co-hosted by University of Toyama

#### **General Chair**

Shigeru Saito, President, University of Toyama

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