

MOBITAS 2022 4TH INTERNATIONAL CONFERENCE ON HCI IN MOBILITY, TRANSPORT AND AUTOMOTIVE SYSTEMS

HCI International 2022

26 June - 1 July 2022

The Conference will be held virtually Jointly held under one management and one registration with HCI International 2022

http://2022.hci.international/mobitas

Chair

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Human computer interaction in the highly complex field of mobility and intermodal transport leads to completely new challenges. A variety of different travelers move in different travel chains. The interplay of such different systems, such as car and bike sharing, local and long-distance public transport and individual transport, must be adapted to the needs of the travelers.

Intelligent traveler information systems must be created to make it easier for travelers to plan, book and execute an intermodal travel chain und to interact with the different systems.

Innovative means of transport are developed, such as electric vehicles and autonomous vehicles. To achieve the acceptance of these systems, human-machine interaction must be completely redesigned.

The related topics include, but are not limited to:

- Cooperative and intelligent transport systems:
 - Cooperative driving and connected vehicles
 - Smart vehicle interaction
 - User interaction for autonomous driving
- User interface research methods in the context of mobility:
 - Tools and simulations for user interfaces
 - Evaluation methods for user interfaces
 - Usability tests in virtual or augmented reality
- Automotive user interfaces:
 - Driver information and assistance systems
 - Navigation systems
 - In-vehicle head-up displays and augmented reality
 - Gaming and entertainment
 - User interfaces for (semi) autonomous driving
 - User interfaces for inter-vehicle communication in the context of V2V, V2I, Car-to-X
- User behavior and modelling, user experience:
 - Driver and passenger user experience
 - Mobility experience in travel chains
 - Driver behavior and modelling: state recognition, intelligent driving assistance
 - Traveler's behavior and modelling
 - Mobility as a lifestyle
- User needs in the context of mobility:
 - User requirements in the context of mobility: methods and tools
 - Women in transport
 - Mobility for elderly or disabled people
 - Multimodal and Intermodal Mobility
 - Micro Mobility
 - Mobility-as-a-Service: Concepts, Projects, Innovations

- Smart Stations and Traveler information systems:
 - Mobility planning, City guides
 - Passenger information
 - Ticketing in public transport
 - Car- and bike sharing system: access and billing
 - \circ $\,$ $\,$ Design and Functionalities of Smart or Virtual Stations
- Mobility Platforms to connect supply and demand of mobility services
 - o Design
 - o Data requirements
 - o Services
 - o Operators
 - o Security
- Urban transport systems:
 - Engineering of mobility services
 - Transportation systems management
 - Last Mile Urban Logistics and Supply Chains
 - Traffic control center and systems
 - Visualization of traffic data
 - Decision support systems in transport
 - Road safety support systems
 - Urban Air Mobility
- Disruptive Technologies supporting Mobility and Traffic
 - Artificial Intelligence
 - Deep Learning
 - Blockchian
 - Virtual- and Augmented Reality

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