



26th IEEE International Conference on Intelligent Transportation Systems

ITSC 2023

Bilbao, Spain
September 24 - 28, 2023

Workshop Proposal

- Title:

Age Friendly Urban Mobility - a case study: the URBANAGE EU project

- Contents:

Motivation and objectives.

As our society continues to age, it is becoming increasingly important to ensure that our cities and communities are designed with the needs of older adults in mind. Urban planners and city administrators play a critical role in shaping the built environment, and it is essential that they have the tools and resources they need to create age-friendly communities. Age-friendly mobility and access to essential services should be guaranteed by public institutions. In this context, URBANAGE EU project has fostered the development of an integrated platform that allows to know current state of such age friendliness through a set of defined KPIs, as well as the tools to project and develop new infrastructures that increase the urban age friendliness.

URBANAGE ecosystem provides a suite of tools and resources specifically designed to help urban planners and city administrators create communities that are inclusive and accessible for people of all ages. Its users can access a range of features that support age-friendly urban planning, from data-driven insights on the needs and preferences of older adults, to design guidelines and best practices for creating environments that are safe, walkable, and welcoming for people of all ages. This platform also provides a collaborative space for urban planners and administrators to connect, and work together to create better, more inclusive communities. By leveraging the latest data, technology, and best practices, we believe that we can build a more equitable, sustainable, and age-friendly future for all

- Relevance to the ITS community.

Age friendliness of a city is strongly coupled with the access to certain services for all citizens, and with the increase of mobility within a city. Thus, key indicators such the availability of a health service or the vicinity of a green area can be improved by creating new services or areas, but also by improving the ways in which citizens move in the city. Transportation and mobility resources are a key element in the ideation and development of an Age Friendly City

- Topics of interest.

- Age Friendly Mobility
- Age Friendly Route Planning
- Urban planning

- Walkability index
- Digital Twin
- Green Comfort index
- Travel time matrix
- Age Friendly Neighborhood index
- Age friendly cities
- Dedicated website.
 - <https://www.urbanage.eu/>
- Format: Full day/half day/other (provide details)

Half Day

| Item | Presenter | Time | Topic |
|---------------|--|--------------|---|
| Opening | Dr. Patricia Molina | 9:00-9:15 | How the Urbanage Ecosystem supports Age Friendly cities' urban planning. |
| Invited Talks | Mr Andoni Aranguren Mr Asel Villanueva Dr. Jose Luis Izkara Ms. Silvia Urra | 9:15 – 10:30 | <ul style="list-style-type: none"> • Age Friendly Route Planner • Simulation tool for long term urban planning. • Age Friendly Neighbourhood Index |
| BREAK | | 10:30-11:00 | |
| Invited Talks | Dr. Christof Fink Mr. Jan Deprez Mr. Ramiro Castañeda | 11:00-12:00 | <ul style="list-style-type: none"> • Travel time Matrix: the case of Helsinki • Green Comfort Index • Age friendly route planner app app. |
| Paper Session | Paper authors | 12:00-13:00 | TBD |

- Organizers (names, affiliations, emails, and short bio):
 - Patricia Molina -TECNALIA (patricia.molina@tecnalia.com): Urban Planner PhD and Architect from Universidad Politécnica de Madrid (Spain) with a Master's degree from the Department of Urban Studies and Planning of the Massachusetts Institute of Technology (USA). Since 2022 she is the Director of City, Territory and the Environment at Tecnalía, after 8 years of leading the Urban Transformation Lab. She manages a multidisciplinary team of 47 researchers, working with public and private organizations in helping cities and territories to deal with environmental, social and economic challenges using data, technology and innovation to enhance decision-making and public policy. She has published and lectured about urban sustainability, community engagement, and urban innovation, and she is co-directing 3 doctoral theses

- on the integration of energy transition in urban planning processes, planning for age-friendly cities, and exploring AI potential in urban planning and management.
- Silvia Urrea – TECNALIA (Silvia.urra@tecnalia.com): Architect by the E.T.S. of San Sebastian (2004), specializing in Building. She joined Tecnalía and her activity was related to the field of building rehabilitation. She has more than 10 years of experience in R&D projects related to construction and the ageing population. In this field she has specialised in the analysis of the reality of the built environment in relation to the needs of the population and covers issues related to accessibility and universal design, and new constructive and technological solutions. She is a member of the executive board of the Built4Life committee of the ECTP and of the advisory board of the Joint Programming Initiative More Years, Better Lives (JPI MYBL). She has coordinated the European H2020 Homes4Life project and is also part of the technical coordination of the URBANAGE(H2020) project and the drOp (HE) project.
 - Andoni Aranguren -TECNALIA (Andoni.aranguren@tecnalia.com): Andoni was born in Sodupe, Bizkaia. He studied Computer Engineering, specialising in Computer Science at the University of the Basque Country. His final degree work was a study in which he applied ML techniques to the public procurement market, which was later taken up, expanded and published in Award Price Estimator for Public Procurement Auctions Using Machine Learning Algorithms: Case Study with Tenders from Spain - Studies in Informatics and Control - ICI Bucharest by a group of researchers from the UPV and the University of Oviedo. He has experience as a data scientist in full pipeline of AI projects (data collection, data transformation, persistence, model design, dockerisation). He currently works at Tecnalía as a hybrid profile that combines the application of AI techniques to data driven problems and their integration in higher TRL solutions. He especially works on optimisation and regression studies.
 - Asel Villanueva –TECNALIA (Asel.villanueva@tecnalia.com): Computer Engineer, from the University of Deusto (2013). Master's degree in information security, from the University of Deusto (2014). Researcher at TECNALIA since 02/01/2018 in the Energy, Climate and Urban Transition Unit in the City, Territory and Environment area, participating in various national and European projects, his main line of research covers GIS and web development. He has worked in several companies in the sector in R&D departments, developing web and mobile projects since 2012, he has experience developing for ERP, CRM, MES and CMMS systems.
 - Sergio Campos – TECNALIA (Sergio.campos@tecnalia.com): Bachelor in Computer Science from the Polytechnic University of Madrid (UPM), MSc in Decision Engineering (URJC). He brings extensive experience in the industrial sector and ICT, participating in the management, analysis and implementation of numerous projects in the area of real-time control systems applied to different areas: transport (signalling and railway regulation in THALES, tolling in TELVENT) and energy (decision support systems with IBERINCO). Once at Tecnalía, project manager in the Smart Mobility area of the Optimization, Modeling and Analytics Area (OPTIMA), addressing the improvement of operational processes in transport and urban mobility planning through the application of analytical techniques and machine learning, deployed in Big Data

infrastructure and high-performance computing. Coordinates different R+D+i and consulting projects, at European, national and regional levels, both for private companies and Public Administrations.

- **Potential contributors to the workshop (names, affiliations, contact information, abstracts (if available):**
 - **Chair/Moderator:** - Patricia Molina, TECNALIA, Spain - Sergio Campos, TECNALIA, Spain
 - **Invited speakers: Names:** to be confirmed. Christof Fink, Digital Geography Lab, University of Helsinki; Jan Deprez, IMEC, Belgium; Ramiro Castañeda, CIC, Spain, ETC
 - **Affiliations:** University of Helsinki, IMEC, CIC. We have excellent cooperation with these organizations. And they have contributed to our previous Workshops in the past years (10 times).
- **Intended audience and expected attendance for the workshop (including a clear statement how interaction between presenters and attendance will be fostered):**

The target and expected audience for the workshop is mainly from industry and academia, completed with experts (especially from industry) and Public Institutions. The workshop is expected to be interactive, and it will encourage technical debate. Participants will have an excellent opportunity to discuss with and to challenge distinguished speakers and panelists.

- **Invited speakers (if any):**
 - Dr. Christof Fink
 - Mr. Jan Deprez
 - Mr. Ramiro Castañeda
- **Materials and equipment needed for the workshop:**
 - The half-day workshop will be in person. 1 screen, 1 projector, wifi code, and a good internet connection are needed.
- **Contact details of the proposers (email, postal address, etc):**
Silvia Urra – TECNALIA (Silvia.urra@tecnalia.com)