Korea-EU Horizon Europe Researchers Networking Forum

on Energy & Advanced Mobility

Speaker: Emilija Stojmenova Duh

- **Position: Associate professor**
- **Organization: University of Ljubljana**
- **Research Area: Advanced mobility**

University of Ljubljana

- Founded in 1919
- Biggest, oldest and highest-ranked university in Slovenia
- ~ 38.000 graduate and postgraduate students, ranking it among the largest universities in the world
- 501 - 600 on Shanghai Ranking list

Faculty of Electrical Engineering at UL

- Human-machine interaction, primarily focusing on in-vehicle HMI
- Driving simulation
- Biometric data-based assessment: ECG, EGG, PPG, EDA, eye tracking and pupilometry
- Driving performance-based assessment: lateral and longitudinal control of the vehicle, traffic rule following, accidents and near-accidents)
- Design of HMI solutions that improve performance, comfort, trust and overall acceptance of novel technologies
- Methods for assessment, training and rehabilitation of elderly and neurologically impaired drivers

Faculty of Electrical Engineering at UL

Simulator system

Simulation of driving environment

Simulation of operation of all SAE levels of automation

Biometric sensors

Faculty of Electrical Engineering at UL

Driving Simulator

Expertise

Our contribution to projects

- Human-machine interaction, primarily focusing on in-vehicle HMI
- Biometric data-based assessment: ECG, EGG, PPG, EDA, eye tracking and pupilometry
- Driving performance-based assessment: lateral and longitudinal control of the vehicle, traffic rule following, accidents and near-accidents)
- Design of HMI solutions that improve performance, comfort, trust and overall acceptance of novel technologies
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Expertise

Relevant past and current projects and activities

- Holistic Approach for Driver Role Integration and Automation Allocation for European Mobility needs – HADRIAN
- Federated cyber-physical infrastructure for operational design domain continuity – FRODDO
- Wider Impacts and Scenario Evaluation of Autonomous and Connected Transport – WISE-ACT
- Building Opportunities for Participation and Accessibility through lifelong community Mobility – BOPALiM
- Numerous bilateral (Virginita Tech, Columbia University, University of Washington, Paris Lodron University of Salzburg) and national projects

Interest

Targeted calls for 2026-2027 (but not limited to):

- HORIZON-CL5-2026-05-D6-10: Enhanced resilience in multimodal passenger transport through digital technologies and generative and discriminative AI
- HORIZON-CL5-2026-10-D6-03: Generative AI for smarter CCAM: enhancing perception, decision-making, and validation
- HORIZON-CL5-2027-05-D6-04: Holistic solutions for CCAM integration in critical scenarios
- HORIZON-CL5-2027-05-D6-08: Enhancing Mobility for All: affordable, reliable, and accessible multimodal transport for inclusive rural and urban connectivity – Societal Readiness pilot
- Similar RIA and IA calls in CL5 and other Horizon Europe supported schemes

Our vision:
To advance the development of mobility solutions that are safer, more inclusive, and environmentally sustainable, with the use of digital technologies and AI.

Interest

Partner profiles:

- SMEs, LEs and similar profiles that enable reach of higher TRL
- UNIs and RTOs with complementary areas of expertise
- NGO for Societal readiness evaluation and assessment

Contact Details

Thank you.

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