38th ICTCT Conference 2026

Road Safety in the age of AI: Innovations, challenges, and opportunities

Zagreb, Croatia

University of Zagreb
FACULTY OF TRANSPORT AND TRAFFIC SCIENCES

Center of Excellence
for Road Traffic Safety

38th ICTCT Conference 2026 - Zagreb, Croatia - Final programme

DAY 1 — Thursday, 22 October 2026									
08:15-09:00	Registration & Coffee								
09:00-09:15	Welcome speeches — Hall "Market"								
09:15-10:15	**KEYNOTE 1 — Cristina Olaverri-Monreal (JKU Linz): "Safer Roads: Integrating Human Behaviour, Automation, and Data-Driven Systems" — Hall "Market"; Chair: Stijn Daniels (KU Leuven)**								
10:15-10:30	Coffee break — rooms split into Market 1 / Market 2 / Next Level								
10:30-11:30	**Oral Session 1A – Market 1**			**Oral Session 1B – Market 2**			**Oral Session 1C – Next Level**		
	Topic: AI in road safety; Chair: Dario Babic (University of Zagreb)			***Topic: Driving Simulations; Chair: Salvatore Cafiso (niversity of Catania)***			***Topic: Driving Simulations; Chair: Giuseppina Pappalardo (University of Catania)***		
	1	Claire Naude	Automatic Detection of Geometric Anomalies in Speed Humps Using Machine Learning on Vehicle Dynamics Dana	1	İbrahim Öztürk	Improving Young Novice Drivers' Hazard Anticipation Skills: Simulator and Questionnaire Evaluations of the impacts of Driver Training over time	1	Michael van Eggermond	Salience, Effort and Expectancy at Intersections: How Infrastructure Design Affects Driver Perception of Cyclists
	2	Arpit Jadon	Know What You Ask – Evaluating LLM-Assisted Decision Support for Road Safety Practitioners	2	Daniel Eisele	Cycling Infrastructure at Permissive Signalized Intersections: A Simulator Study on Objective and Subjective Safety of Cyclists and Drivers	2	Abrar Hazoor	How Safe Are Takeover Control Mechanisms in Conditionally Automated Vehicles under Distracted Conditions?
	3	Annika Lux	Recognizing Cyclists' Signals: What Automated Systems can learn from Human Perception	3	A. Marie Harkin	Effects of Bicycle Infrastructure on Cyclists' Experience and Behaviour in Roundabouts	3	Monica Meocci	The Effect of Alcohol Impairment on Visual Attention During Critical Events in Road Safety
	4	Víctor de Lucas Maisanaba	AI Based Road Safety Management Platform for Network Level Decision Support on Spain's Conventional Road Network	4	Luca Tefa	Safety of driver-pedestrian interactions along urban frontage roads with shared lanes	4	Ágoston Pál Sándor	How In-Vehicle Tablet Interface Design Influences Driver Eyes-Off-Road Behavior: Eye-Tracking AOI Analysis in Simulation
11:30-11:45	Coffee break								
11:45-12:45	**Oral Session 2A – Market 1**			**Oral Session 2B – Market 2**			**Oral Session 2C – Next Level**		
	Topic: Human Factors, Pedestrians, and Drivers; Chair: Aliaksei Laureshyn (Lund University)			***Topic: Safety data processing; Chair: Clemens Kaufmann (Factum)***			***Topic: Driving Simulations; Chair: Marija Ferko (University of Zagreb)***		
	1	Ruben A. Kuipers	Threading the needle: A study into gap acceptance for car-cyclist interactions	1	Ozlem Simsekoglu	Gender differences in intention to use shared micromobility (SMM)	1	Salvatore Cafiso	Drivers' Trust in Proactive V2I Warning Systems at Complex Urban Intersections: A Driving Simulator Study
	2	Michael Oehl	Highly automated vehicles' implicitly and explicitly communicated intents to interact with pedestrians and pedestrians' appraisals across different cultures – Is universal design of these interfaces appropriate, and what should be taken into account?	2	Katia Pagle	Crowdsourced Pavement Intelligence for Safer Urban Cycling Infrastructure: Platform Development and Pre-Pilot Evaluation within the CAMBER Project	2	Mahdi Sadeqi Bajestani	Evaluating Low-Cost Safety Interventions in School Zones: A Driving Simulator Study
	3	Anja Katharina Huemer	Why Do Road Users Break the Rules? Motivations Behind Cycling-Related Traffic Violations	3	Muhammad Waqas Ahmed	Introducing a Drone-based, Synthetic Road-user Trajectory Simulation for Road Safety Analysis	3	Giuseppina Pappalardo	Behavioural Effects of a Bicycle-Mounted Collision Warning Device at a Simulated Intersection with Limited Sight Distance
	4	Thomas Wold	Confident but vulnerable: Insights on young motorcyclists' decision-making and riding behaviour	4	Hiba Nassereddine	Prevalence of Rule Violations by and Against Cyclists: A Comparison of Self-Reported and Crash Data			
12:45-13:00	Group picture								
13:00-14:00	Lunch								
14:00-15:15	**Poster Session 3A – Market 1**			**Poster Session 3B – Market 2**			**Special Session – Next Level**		
	Topic: SMoS / Safety Analysis			***Topic: AI in road safety & Driving Simulations***			***Topic: Centre of Excellence for Road Traffic Safety (CERTS) at Faculty of Transport and Traffic Sciences, University of Zagreb***		
	1	Clemens Schicktanz	Assessing the Potential of Small Open Vision-Language Models for Traffic Conflict Criticality Assessment: A Comparative Study of Unprotected Left-Turn Interactions with Oncoming Traffic	1	Annika Lux	Capturing Cyclists' Driving Errors – privacy-compliant methods, insights, and infrastructure approaches concerning AI	1	Željko Šarić (UNIZG-CERTS)	Centre of Excellence for Road Traffic Safety (CERTS): vision, governance structure and CERTS laboratories
	2	Giuseppina Pappalardo	Spatial Analysis of Cyclist-Related Road Accidents in Urban area	2	Daniel Pavleski	Understanding the Relationship Between Modal Split and Road Safety: A Machine Learning Approach	2	Helena Dejanović Škvarić (UNIZG-CERTS)	Presentation of the project "Professionalisation of the Centre of Excellence for Road Traffic Safety"
	3	Victoria Gitelman	Analyses of automatically-generated data on e-scooter behaviours to characterize the safety level of urban sites and estimate safety-related interventions	3	Attila Borsos	What makes a bicycle simulator valid for experimental research - a state-of-the art review	3	Dario Babić (UNIZG-CERTS)	Presentation of Horizon Europe TWIN-SAFE project "Advancing Road Safety Through Twinning"
	4	Ebru Bölük	Cycling Safety in One-Way Streets: Insights from OSM and Crash Data	4	Siri Hegna Berge	Trust and perceived safety in shared automated vehicles: User experiences from a public transport pilot in Oslo			
	5	Jiří Ambros	Disentangling the relationship between driving speed, road infrastructure and traffic safety	5	Markus Strigel	Objective and subjective safety at urban signalized intersections: A simulator study on effects of infrastructure and traffic signal control for car drivers and cyclists			
	6	Yen-Lin Huang	Safe Speed for Roads with Mixed Cars and Motorbikes						
15:15-15:30	Coffee break								

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	Poster Session 4A – Market 1			Poster Session 4B – Market 2			Special Session – Next Level		
	Topic: Human Factors, Pedestrians, and Drivers			*Topic: Infrastructure Safety*			*Topic: From Research to Impact — Knowledge Centre and the DIGIT Project*		
15:30-16:30	1	Fatemeh Siar	RoadBehave: Monitoring Multi-User Riding Behavior	1	Leonid Ljubotina	Cycling the edge: state-of-the-art review on hard shoulder cycling practices across EU and USA	1	Carmelo D'agostino	Building the partnership: from TWIN-SAFE to a joint knowledge centre
	2	Amira Hammami	Real Eyes, Realize, Real Lives: Do Smart Crossings Actually Guide Driver Attention?	2	Alejandra Sofia Fonseca Cabrera	Perceived safety of edge elements in micromobility infrastructure	2	Dario Babić (UNIZG-CERTS) Carmelo D'agostino (Lund University) Tom Brijs (Hasselt University)	What we do: Research highlights from FTTS, Hasselt and Lund
	3	David Llopis Castelló	Trajectory analysis of micromobility users in horizontal curves	3	Juliane Anke	Platform work by bicycle: Road safety of delivery riders in Germany	3	Tom Brijs (Hasselt University)	Open discussion: When is a road safety system actually a Safe System?
	4	Alev Aktas	The Turkish adaptation of the Cycling Anger Expression Inventory (CAX) and its associations with cycling behavior and risk perception	4	Jan Elgner	Accounting for temporal variations of driving speed			
	5	Samir Hussein Ali Mohammad	Why do drivers misidentify whether their vehicles have ADAS?	5	Katarina Krišto	Spatial Distribution of Traffic Accidents Across Modal Interactions in Zagreb, Croatia			
	6	Niyazi Özgür	Medical Insight into Micromobility Related Accidents in Relation with Urban Network Topographies	6	Ivana Selak	Nighttime visibility of pedestrian crossings: field evaluation of road marking materials and glass beads			
16:30-17:30	**Meeting of ICTCT sub-committee on on bicycle simulator research - Hall "Dialog"; Chair: Attila Borsos (University of Győr)**								
19:00-23:30	**Conference dinner - Restaurant Lobby (Ul. Ivana Lučića 2, Zagreb) - 7 min by foot from conference venue (Hotel International)**								

DAY 2 — Friday, 23 October 2026

8:00-9:00	**Meeting of ICTCT sub-committee on surrogate measures of safety (SMoS) - Hall "Dialog"; Chair: Aliaksei Laureshyn (Lund University)**								
08:30-09:15	Registration & Coffee								
	Poster Session 6A – Market 1			Poster Session 6B – Market 2			Poster Session 6C – Next Level		
	Topic: Safety applications & measures			*Topic: Safety applications & measures*			*Topic: Safety applications & measures*		
9:15-10:30	1	Nicolas Saunier	COVID-19 effects on road safety and driving behaviours	1	Sándor Ágoston Pál	Black Box on Two Wheels: ABiDA as a Multimodal Platform for Cyclist Behaviour and Physiological Monitoring	1	Jean Naika	Understanding behavioural factors contributing to risky riding among motorcycle taxi riders in Kampala, Uganda.
	2	Hilde Kjelsrud	Professional Learning and Identity Construction Among Heavy- Vehicle Driving Teacher Students	2	Fabian Niemann	Can Able-Bodied Participants Serve as Proxies for Mobility Aid Users in Laboratory Studies of Inclined Walkways?	2	Hiba Nassereddine	How Accessible Are Inclined Walkways? Evidence from Mobility Aid Users' Experiences and Field Observations
	3	Rosemond Nyansafo	Temperament Behind The Wheel: A Psychological Analysis Of Personality And Driving Behaviour In Urban Traffic Contexts	3	Andrea Paliotto	Systematic Review of speed evaluation and monitoring methods for road safety: a decade of research	3	Anton Pashkevich	Psychological quality of urban public space: towards a methodology to evaluate inclusive and resilient urban environments
	4	Niyazi Özgür	Development of a Novel Wearable Instrumentation System for Micromobility Studies	4	Clemens Schicktanz	Analysis of crashes using detailed exposure data: A Case Study of the city of Braunschweig	4	Mio Suzuki	A Study on Driving Behavior Characteristics of MCI drivers on Public Roads
	5	Sonia Zajac	The role of microscopic traffic flow simulation in defining the scope of application for multi-purpose lanes (2-1 road): the case of the "MehrzweckSicher" project	5	Tina Cvahte Ojstersek	Legal awareness and non-compliance in e-scooter riding surfaces: evidence from Slovenia	5	Şerife Yılmaz	Cycling in Türkiye: Gendered Use Patterns, Risks, Interactions, and Perceived Stigma
	6	Tijmen den Blaauwen	Between Feeling and Reason: A Scoping Review of Questionnaire-Based Measurements of Traffic Risk Perception	6	Arash Hassani	Validation of Point Cloud of Active Road Users LiDAR Tracking Data for Road Safety Assessment	6	Rakshita Verma	Identification of Intersection Influence Zones for Cyclists at Unsignalised Intersections Using Instrumented Bicycle Data
	7	Marija Ferko	Behavioral adaptation to automated speed enforcement: a study using naturalistic smartphone-based data from car drivers and motorcyclists	7	Carmelo D'agostino	Crash Frequency Modelling for Italian Road Tunnels			
10:30-11:00	Coffee break								
	Oral Session 9A – Market 1			Oral Session 9B – Market 2			Oral Session 9C – Next Level		
	Topic: Safety applications & measures; Chair: Attila Borsos (University of Győr)			*Topic: Safety data processing; Chair: Stijn Daniels (KU Leuven)*			*Topic: Infrastructure Safety; Chair: Darko Babic (University of Zagreb)*		
11:00-12:00	1	Stefan Bohmann	How Steep Is Too Steep? Experimental Evidence on the Usability of Inclined Walkways for Mobility Aid Users	1	Isaac Ndumbe Jackai II	A Conflict-Based Diagnostic Framework for Signalized Intersections Integrating Conflict Characteristics and Signal Phases	1	Armin Kollascheck	Lane change behaviour at turbo roundabouts with markings for lane delineation
	2	Anamarija Poll	Age-Related Differences in Road Crash Characteristics: Evidence from Slovenia	2	Tove Hels	Cyclist and pedestrian self-reported accidents – patterns and prevention efforts	2	Nino Chkhartishvili	Behavioural Responses to a Light Rail Crossing Warning System: Qualitative Insights from Helsinki
	3	Assaf Sharon	An evaluation study of the safety effects of an advanced training course for motorcycle riders	3	Nicolas Saunier	Video-Based Analysis of Crossing Behavior of Pedestrians with Assisting and Walking Devices at a Signalized Intersection	3	Borislav Hristov	Gaze behavior of male and female drivers at crosswalks
	4	Matilda Magnusson	Acceptance of road safety measures across citizens, professionals, and politicians	4	Torkel Bjornskau	Pedestrian Falls and Collisions: Preliminary Findings from a Norwegian Injury Registration Study	4	Stefan Bohmann	Assessment of Subjective Safety and Comfort in Cycling: Development and Validation of the SuSyCo Scale
12:00-13:00	Lunch								

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13:00-14:00	**KEYNOTE 2 — Oscar Oviedo-Trespalacios (TU Delft): "Ethical and privacy issues in road safety in the age of AI" — Hall "Market"; Chair: Anja Katharina Huemer (Universität der Bundeswehr München)**					
14:00-14:15	Coffee break					
14:15-15:15	**Oral Session 8A – Market 1**			**Oral Session 8B – Market 2**		
	Topic: Human Factors, Pedestrians, and Drivers; Chair: Anton Pashkevich (Politechnika Krakowska)			***Topic: SMoS / Safety Analysis; Chair: Aliaksei Laureshyn (Lund University)***		
	1	Eduardo Nesi	Pedestrian behavior at the crosswalk and their interaction with an automated vehicle: a full-scale experiment	1	Aslak Fyhri	Perceived Traffic Safety in Urban Areas: Implications for Low- and Middle-Income Countries
	2	Alejandra Sofia Fonseca Cabrera	Gender differences in speed behaviour on horizontal curves in micromobility infrastructure	2	Attila Borsos	Applicability of TTC and PET for Pedestrian–Vehicle Interactions: Conflict Analysis Using Extreme Value Theory
	3	Giuseppe Marinelli	Comparative Analysis of Adaptive Cruise Control Performance Across Vehicle Brands	3	Fabian Niemann	Beyond Compliance: Subjective Legitimacy of Traffic Rule Violations Involving Cyclists and Drivers
	4	Tina Cvahte Ojstersek	Training and driving test outcomes among accompanied driving candidates	4	Bhavna Katoch	Conflict Analysis in Urban School Zones using Surrogate Safety Measures
15:15-15:45	**Closing session & Announcement ICTCT 2027 — Market 1**					
18:30	Social event - Fakin Craft Bar (Ul. grada Vukovara 68, Zagreb) - 6 min by foot from conference venue (Hotel International)					