

# 1<sup>st</sup> International Workshop on Ubiquitous Computing for Vulnerable Road Users

2025 ACM International Joint Conference on Pervasive and Ubiquitous Computing, October 12-13, 2025, at Aalto University, Espoo, Finland

## TECHNICAL PROGRAM

Sunday, October 11, 2025

<b>09:00-09:15</b>	<b>Opening</b> (Chair: Klaus David, Judith Heinisch)
<b>09:15-10:15</b>	<b>Session 1 – Keynote: Prof. Klaus David</b> (Chair: Hiruni Kegalle)
	<i>VRU Safety facilitated by pervasive computing: The wireless seat belt</i>
<b>10:15-10:45</b>	<b>Coffee Break</b>
<b>10:45-12:00</b>	<b>Session 2</b> (Chair: Judith Heinisch, Si Zuo)
10:45-11:00	<i>Pedaling Gossips: Towards Location-Privacy-Preserved Data Sharing with Smart Bicycles</i>
11:00-11:15	<i>BicycleSense360: Real-World Multi-Modal Naturalistic Cycling Data Acquisition and Synchronization System</i>
11:15-11:30	<i>Eye on the Street: Computer Vision for Spatial-Temporal Mapping of Street Safety Elements</i>
11:30-11:45	<i>UWBike: Global Bicycle Positioning System Using a Single Ultra-Wideband Reference Point</i>
11:45-12:00	<i>Predicting Ego Cyclist Trajectories Using Bicycle-Mounted Sensors with CNN-LSTM</i>
<b>12:00– 12:15</b>	<b>Discussion and Closing</b> (Chair: Klaus David)