

mart Talks

Season 4

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SmartTalk: Covivio, Sala Grande https://smartdata.polito.it/category/smarttalks/

## Andrea Avignone

Andrea Avignone is enrolled in the "Urban Data Science" Ph.D. program at the Department of Control and Computer Engineering in Politecnico di Torino. He is also member of the SmartData@PoliTO research center and the racing motorcycle university team 2WheelsPoliTo. He obtained the B.Sc. in Electronic And Communications Engineering and the M.Sc. in ICT for Smart Societies at Politecnico di Torino. His current research interests include applications of data science and machine learning solutions within the Smart City context.

## Are we Traffic-Ready? Navigating the Integration of Autonomous Vehicles in Urban Landscapes

## ABSTRACT

The advent of autonomous vehicles stands as a key aspect in the mobility landscape of future smart cities. A major area of impact is the interaction between pedestrians and autonomous vehicles, especially at unsignalized crosswalks. Through the collaboration between Politecnico di Torino (DAUIN and DIATI departments) and Fondazione Links, we conducted a conflict analysis to compare the safety of pedestrian interactions with both the autonomous shuttle and conventional vehicles using video data, showing the implications and challenges of this future traffic wave.