

CALL FOR PAPERS

Causing an immense cost to economies and great trauma to societies, road accidents have always constituted one of the top priorities in transportation research. However, a particular element that makes the road safety research an even higher priority at this current point in time is the fact that both the concept and technology of transportation are rapidly evolving. This introduces new challenges, as well as new opportunities, for the researchers and practitioners of road safety. Therefore, it is expected that the landscape of this research will transform rapidly over the coming years.

The emergence of driving automation and connected transportation systems are only few dimensions in which advanced technology is expected to make significant changes to road safety. These changes, however, may also embody new safety problems that did not exist prior to these developments. On the other hand, these technological advancements have offered new methods for researchers to enhance their experimentation and data collection capabilities.

The purpose of this special issue, in general, is to help better understand how emerging technologies will impact on the practice and research of road safety. The focus is on these three dimensions: (i) the impact of emerging technologies on reducing the number of crashes or crash severity, (ii) potential new safety risks/issues that may be introduced by an evolving road system (and potential solutions to those), and (iii) benefits that advanced technology can offer to road safety researchers.

Within the above dimensions, the scope of the special issue welcomes high quality original research and review articles that cover a broad range of topics related to road accidents including those of cars, heavy vehicles, pedestrians, and cyclists.

Potential topics include but are not limited to the following:

- ▶ Connected intelligent transport systems and their impact on the safety of road users
- ▶ Driver, passenger, pedestrian, and cyclist interactions with (semi)automated cars
- ▶ The impact of automation and cruise control on crash prevention
- ▶ Application of technology in the prevention of drink-driving, drug-driving, and risky driving
- ▶ New aspects of driving/cycling aggression in the era of evolving driving technology
- ▶ The relationship between driver psychology (e.g., personality traits, attention deficit) and modern driving technology
- ▶ Elderly drivers and their interaction with modern driving technology
- ▶ The future of road safety regulation and driving education
- ▶ Training/education systems for (semi)automated driving
- ▶ Application of emerging technologies in driving behavior research (e.g., advanced driving simulators, VR, EEG, GSR, and fMRI)
- ▶ Application of emerging technologies in road safety data collection (e.g., image processing methods, drones, and GPS)
- ▶ Advanced road safety systems (e.g., smart signs and advanced sensors/detectors)
- ▶ Advanced driving safety systems (e.g., fatigue/distraction detection systems and night vision systems)
- ▶ Estimating the likely uptake of road/vehicle safety technologies
- ▶ Data-driven machine learning approaches in road safety research

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jat/rsdb/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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