1. Record Nr. UNISA996581066003316

Titolo	White Paper : Example Applications of IEEE Std 2846-2022 to Formal Safety-Related Models / / Institute of Electrical and Electronics Engineers
Pubbl/distr/stampa	New York : , : IEEE, , [2023]
ISBN	1-5044-9458-X
Descrizione fisica	1 online resource (26 pages)
Disciplina	629.231
Soggetti	Automobiles - Safety measures
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	While automated driving system (ADS)-operated vehicles hold the potential for safety improvement compared to human drivers, the recognition that transportation will continue to entail some level of risk has to be considered. Human drivers rely on extensive daily experience in their interactions with other agents on the road, which helps them craft assumptions about reasonably foreseeable behavior of other road users. Similarly, ADS-operated vehicles will also need to make assumptions. Such assumptions play a role within ADS safety-related models, which provide a representation of safety-relevant aspects of driving behavior pertaining to both ADS-operated vehicles and other road users. Furthermore, formal safety-related models provide transparency and certainty in ADS decision-making contexts as they can be formally verified. Therefore, this paper introduces how several safety-related models are making use of reasonably foreseeable assumptions to help with the decision making of an ADS-operated vehicle.