

1. Record Nr.	UNINA9910760277303321
Autore	Kemeny Andras
Titolo	Autonomous Vehicles and Virtual Reality [[electronic resource]] : The New Automobile Industrial Revolution / / by Andras Kemeny
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2024
ISBN	3-031-45263-1
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (140 pages)
Disciplina	629.046
Soggetti	Automotive engineering Computer graphics Virtual reality Augmented reality Neurology Cooperating objects (Computer systems) Biomedical engineering Automotive Engineering Computer Graphics Virtual and Augmented Reality Cyber-Physical Systems Biomedical Engineering and Bioengineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Virtual and Augmented Reality -- Autonomous Vehicles -- Augmented Reality for Self-Driving -- Get Rid of Motion Sickness -- On-Board Virtual Reality & Applications -- Conclusion.
Sommario/riassunto	This book concisely describes the technologies, human perception, and cognition issues relevant to autonomous vehicles. It also gives an insight in the changes bring about our future everyday lives. Autonomous vehicles are the future of the automobile industry. Automated driving (AD), also called self-driving, raises however several multiple questions, among them those of user safety and acceptance. Comprehensive HMI system design, with windshield display technics,

will be necessary to deal with driving task delegations, bringing the use of VR or augmented reality (AR) technologies. In addition, the use of VR for all the vehicle interiors will progressively be proposed for entertainment, online business activities and for modified visual motion perception to alleviate car sickness, a form of motion sickness. Indeed, car sickness is already well known for many passengers, especially when reading or operating smartphones or other display devices. It is called to increase significantly with the introduction of autonomous vehicles where all users will be for long periods in various sitting positions. These two new trends, AD and VR, are already modifying our relationship with the world and the society. All together, they will change our way of life forever. The book will be of interest to professionals in the auto industry, researchers in automotive engineering and computer science and all those interested in the future of transport.
