

1. Record Nr.	UNINA9910852999803321
Autore	Maurer Markus
Titolo	Autonomous Driving : Technical, Legal and Social Aspects // edited by Markus Maurer, J. Christian Gerdes, Barbara Lenz, Hermann Winner
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2016
ISBN	9783662488478 3662488477
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource
Classificazione	BUS087000COM070000TEC009090TEC016020
Altri autori (Persone)	MaurerMarkus GerdesJ. Christian LenzBarbara WinnerHermann
Disciplina	629.272
Soggetti	Automotive engineering Engineering design User interfaces (Computer systems) Human-computer interaction Technological innovations Automotive Engineering Engineering Design User Interfaces and Human Computer Interaction Innovation and Technology Management
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Section I – Man and Machine -- Section II – Mobility -- Section III – Traffic -- Section IV – Safety and Security -- Section V – Law and Liability -- Section VI – Acceptance.
Sommario/riassunto	This book takes a look at fully automated, autonomous vehicles and discusses many open questions: How can autonomous vehicles be integrated into the current transportation system with diverse users and human drivers? Where do automated vehicles fall under current legal frameworks? What risks are associated with automation and how will society respond to these risks? How will the marketplace react to

automated vehicles and what changes may be necessary for companies? Experts from Germany and the United States define key societal, engineering, and mobility issues related to the automation of vehicles. They discuss the decisions programmers of automated vehicles must make to enable vehicles to perceive their environment, interact with other road users, and choose actions that may have ethical consequences. The authors further identify expectations and concerns that will form the basis for individual and societal acceptance of autonomous driving. While the safety benefits of such vehicles are tremendous, the authors demonstrate that these benefits will only be achieved if vehicles have an appropriate safety concept at the heart of their design. Realizing the potential of automated vehicles to reorganize traffic and transform mobility of people and goods requires similar care in the design of vehicles and networks. By covering all of these topics, the book aims to provide a current, comprehensive, and scientifically sound treatment of the emerging field of "autonomous driving".
