

1. Record Nr.	UNINA9910461572303321
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Titolo	Autonomous ground vehicles // Umit Ozguner, Tankut Acarman, Keith Redmill
Pubbl/distr/stampa	Boston : , : Artech House, , [2011] [Piscataqay, New Jersey] : , : IEEE Xplore, , [2011]
ISBN	1-60807-193-6
Descrizione fisica	1 online resource (288 p.)
Collana	Artech House intelligent transportation systems series
Disciplina	629.2042
Soggetti	Motor vehicles - Safety measures Automobiles - Safety measures Automobiles - Technological innovations Motor vehicles - Technological innovations Intelligent transportation systems Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Introduction -- 2. The role of control in autonomous systems -- 3. System architecture and hybrid system modeling -- 4. Sensors, estimation, and sensor fusion -- 5. Examples of autonomy -- 6. Maps and path planning -- 7. Vehicle-to-vehicle and vehicle-to-infrastructure communication -- 8. Conclusions.
Sommario/riassunto	"In the near future, we will witness vehicles with the ability to provide drivers with several advanced safety and performance assistance features. Autonomous technology in ground vehicles will afford us capabilities like intersection collision warning, lane change warning, backup parking, parallel parking aids, and bus precision parking. Providing you with a practical understanding of this technology area, this innovative resource focuses on basic autonomous control and feedback for stopping and steering ground vehicles. Covering sensors, estimation, and sensor fusion to percept the vehicle motion and surrounding objects, this unique book explains the key aspects that makes autonomous vehicle behavior possible. Moreover, you find detailed examples of fusion and Kalman filtering. From maps, path

planning, and obstacle avoidance scenarios ... to cooperative mobility among autonomous vehicles, vehicle-to-vehicle communication, and vehicle-to-infrastructure communication, this forward-looking book presents the most critical topics in the field today"--Provided by publisher.
