Record Nr. UNISA996464408303316 Autore Su Zhou Titolo The next generation vehicular networks, modeling, algorithm and applications / / Zhou Su [and four others] Pubbl/distr/stampa Cham, Switzerland: ,: Springer, , [2021] ©2021 **ISBN** 3-030-56827-X Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (XIV, 157 p. 46 illus., 45 illus. in color.) Collana Wireless networks Disciplina 388.312 Soggetti Vehicular ad hoc networks (Computer networks) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. 1. Introduction -- 2. Reputation Based Content Delivery in Information Nota di contenuto Centric Vehicular Networks -- 3. Contract Based Edge Caching in Vehicular Network -- 4. Stackelberg Game Based Computation Ofoading in Vehicular Networks.-5. Auction Based Secure Computation Ofoading in Vehicular Networks -- 5. Bargain Game Based Secure Content Delivery in Vehicular Networks -- 6. Deep Learning Based Autonomous Driving in Vehicular Networks -- 7. Conclusions and Future Directions. This book proposes the novel network envisions and framework design Sommario/riassunto principles, in order to systematically expound the next generation vehicular networks, including the modelling, algorithms and practical applications. It focuses on the key enabling technologies to design the next generation vehicular networks with various vehicular services to realize the safe, convenient and comfortable driving. The next generation vehicular networks has emerged to provide services with a high quality of experience (QoE) to vehicles, where both better network maintainability and sustainability can be obtained than before. The framework design principles and related network architecture are also covered in this book. Then, the series of research topics are discussed including the reputation based content centric delivery, the contract

> based mobile edge caching, the Stackelberg game model based computation offloading, the auction game based secure computation offloading, the bargain game based security protection and the deep

learning based autonomous driving. Finally, the investigation, development and future works are also introduced for designing the next generation vehicular networks. The primary audience for this book are researchers, who work in computer science and electronic engineering. Professionals working in the field of mobile networks and communications, as well as engineers and technical staff who work on the development or the standard of computer networks will also find this book useful as a reference.