

1. Record Nr.	UNINA9910845085903321
Autore	Liu Kai
Titolo	Toward Connected, Cooperative and Intelligent IoV : Frontier Technologies and Applications // by Kai Liu, Penglin Dai, Victor C.S. Lee, Joseph Kee-Yin Ng, Sang Hyuk Son
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	9789819996476 9819996473
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (327 pages)
Altri autori (Persone)	DaiPenglin LeeVictor C. S NgJoseph Kee-Yin SonSang Hyuk
Disciplina	004.167
Soggetti	Mobile computing Cooperating objects (Computer systems) Mathematical optimization Algorithms Internet of things Machine learning Mobile Computing Cyber-Physical Systems Discrete Optimization Design and Analysis of Algorithms Internet of Things Machine Learning
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I. Introduction -- Chapter 1. Background of IoV -- Chapter 2. State-of-the-Art -- Part II. Connected IoV: Vehicular Communications and Data Dissemination -- Chapter 3. Data Dissemination via I2V/V2V Communications in Software Defined Vehicular Networks -- Chapter 4. Network Coding Assisted Data Broadcast in Large-Scale Vehicular

Networks -- Chapter 5. Fog Computing Empowered Data Dissemination in Heterogeneous Vehicular Networks -- Chapter 6. Temporal Data Uploading and Dissemination in Real-time Vehicular Networks -- Part III Cooperative IoV: End-Edge-Cloud Cooperative Scheduling and Optimization -- Chapter 7. Convex Optimization on Vehicular End-Edge-Cloud Cooperative Task Offloading -- Chapter 8. An Approximation Algorithm for Joint Data Uploading and Task Offloading in IoV -- Chapter 9. Distributed Task Offloading and Workload Balancing in IoV -- Part IV. Intelligent IoV: Key Enabling Technologies in Vehicular Edge Intelligence -- Chapter 10. Toward Timely and Reliable DNN Inference in Vehicular Edge Intelligence -- Chapter 11. Deep Q-learning based Adaptive Multimedia Streaming in Vehicular Edge Intelligence -- Chapter 12. A Multi-agent Multi-objective Deep Reinforcement Learning Solution for Digital Twin in Vehicular Edge Intelligence -- Part V. Case Studies -- Chapter 13. See Through System -- Chapter 14. Non-Line-of-Sight Collision Warning System -- Chapter 15. Proactive Traffic Abnormality Warning System -- Chapter 16. UAV-assisted Pedestrian Detection System -- Chapter 17. Vehicular Indoor Localization and Tracking System -- Part VI. Conclusion and Future Directions -- Chapter 18. Conclusion -- Chapter 19. Future Directions.

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### Sommario/riassunto

This book offers a comprehensive introduction to technological advances in Internet of Vehicles (IoV), including vehicular communications, vehicular system architectures, data dissemination algorithms, resource allocation schemes, and AI-enabled applications. It focuses on the state-of-the-art IoV with regard to three major directions, namely networking, cooperation, and intelligence, including advanced wireless communication technologies, algorithm theory, optimization mechanisms, and AI technologies. In addition, the book includes a number of case studies with system prototype implementation and hands-on experiments in IoV, making it suitable both as a technical reference work for professionals and as a textbook for graduate students.

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