Wireless Technologies in Vehicular Ad Hoc Networks: Present and Future Challenges

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Inter-vehicle communication (IVC) systems based on wireless ad-hoc networks have the potential to provide increased automotive safety, to achieve smooth traffic flow on the roads, and to improve passenger convenience by providing information and entertainment. However, implementing IVC systems for widespread use also presents a number of technical obstacles.

Wireless Technologies in Vehicular Ad Hoc Networks: Present and Future Challenges explores different models for inter-vehicular communication, in which vehicles are equipped with on-board computers that function as nodes in a wireless network. The book covers current theories and applications in physical, medium access, and network layers of IVC systems, exploring inter-vehicle ad-hoc routing protocols and the challenges of predicting vehicular movements, particularly inter-vehicular distance and relative velocity in highly dynamic and varied real-world scenarios.

Topics Covered:
• Autonomous Mobile Robots
• Coordinating Mobile Robots
• Intrusion Detection Systems
• Mobile Robots and Navigation Systems
• Mobile/Wireless Robot Navigation
• Path Planning in a Mobile Robot
• Unmanned Underwater Vehicles
• Virtual Simulators
• Wireless Ad-Hoc Networks
• Wireless Sensor Networks

Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

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