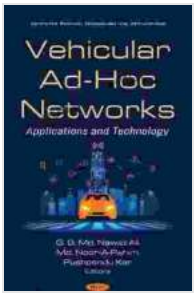
State-of-the-Art and Research in Mobile Vehicular Ad Hoc Networks: A Comprehensive Guide

Mobile Vehicular Ad Hoc Networks (VANETs) are emerging as a key technology for intelligent transportation systems (ITS). These networks allow vehicles to communicate with each other and with roadside infrastructure, creating a dynamic and interconnected ecosystem. This book provides a comprehensive overview of the state-of-the-art and research in VANETs, covering a wide range of topics from routing protocols to security to applications.



Vehicular-2-X Communication: State-of-the-Art and Research in Mobile Vehicular Ad hoc Networks

★★★★★ 5 out of 5

Language	: English
File size	: 11247 KB
Text-to-Speech	: Enabled
Screen Reader	: Supported
Enhanced typesetting	: Enabled
Print length	: 122 pages

Routing Protocols

Routing protocols are essential for VANETs to enable vehicles to communicate with each other efficiently. This book covers a variety of routing protocols designed specifically for VANETs, including:

- Ad hoc On-Demand Distance Vector (AODV)
- Dynamic Source Routing (DSR)
- Optimized Link State Routing (OLSR)
- Geographic Routing Protocol (GRP)

The book also discusses the challenges and limitations of each protocol and provides guidance on selecting the appropriate protocol for different VANET applications.

Security

Security is a critical concern for VANETs, as these networks are vulnerable to a variety of attacks. This book covers the latest security techniques and protocols for VANETs, including:

- Authentication and authorization
- Data encryption
- Intrusion detection and prevention
- Privacy preservation

The book also discusses the challenges and limitations of each security technique and provides guidance on implementing a comprehensive security solution for VANETs.

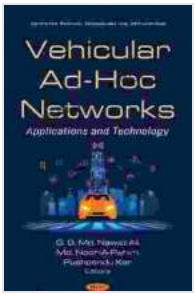
Applications

VANETs have a wide range of potential applications, including:

- Traffic safety
- Traffic management
- Infotainment
- Autonomous driving

This book provides an overview of the latest applications for VANETs and discusses the challenges and opportunities associated with each application. The book also provides guidance on developing and deploying VANET applications.

This book is a comprehensive guide to the state-of-the-art and research in Mobile Vehicular Ad Hoc Networks. It provides a thorough overview of routing protocols, security techniques, and applications for VANETs. The book is an essential resource for researchers, engineers, and anyone interested in the future of intelligent transportation systems.



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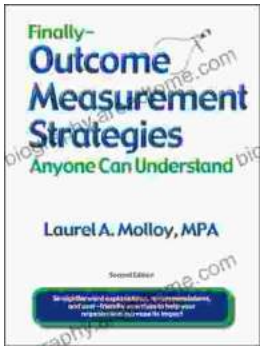
Unveiling the Silent Pandemic: Bacterial Infections and their Devastating Toll on Humanity

Bacterial infections represent a formidable threat to global health, silently plaguing humanity for centuries. These microscopic organisms, lurking within our...



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