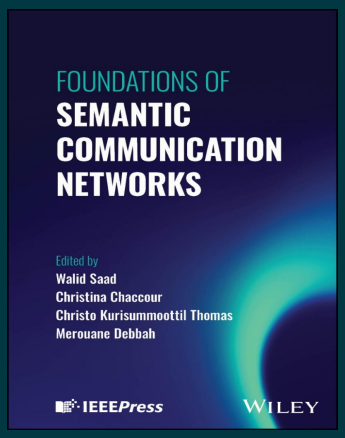
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eBook - Foundations of Semantic Communication Networks

By Walid Saad, Christina Chaccour, Christo Kurisummoottil Thomas, Merouane Debbah

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Description

This advanced reference provides an in-depth treatment of semantic communication networks, presenting foundational theories and mathematical frameworks essential for next-generation connectivity. It explores how semantic information processing, joint source–channel coding, and intelligent resource management can enhance network performance and efficiency, particularly in 6G and beyond systems. The book integrates interdisciplinary perspectives on AI-enhanced communication, secure and privacy-preserving systems, and heterogeneous network interoperability. With rigorous analysis and case studies, it serves as a comprehensive guide for graduate students, researchers, and engineers engaged in wireless communications and intelligent network design.

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Table of Contents

Table of Contents

About the Editors

List of Contributors

Preface

Acknowledgment

Acronyms

1 Introduction to Semantic Communications
2 Semantic Compression and Communication: Fundamentals and Methodologies

3 Toward a Theory of Semantic Information

4 Deep Joint Source and Channel Coding

5 When Information Is a Function of Data – Some Information Theoretic Perspectives on Semantic Communications

6 Interoperability and Coexistence of 6G Semantic, Goal-Oriented, and Legacy Systems

Part II Semantic Communications Networking

7 Optimization of Image Transmission in a Cooperative Semantic Communication Networks

8 Multiple Access Design for Joint Semantic and Classical Communications

9 Contextual Reasoning-based Semantics-Native Communication

10 Interoperable Semantic Communication

Part III Machine Reasoning for Ai-native Semantic Communication Networks

11 Causal Reasoning Foundations of Semantic Communication Systems

12 Reinforcement Learning-Based Unicast and Broadcast Wireless Semantic Communications

13 Imitation Learning-based Implicit Semantic-aware Communication Networks

14 Semantic and Goal-Oriented Communication: A Data Valuation Perspective

Part IV Security of Semantic Networks

15 Securing Semantic Communications Against Adversarial Attacks

16 Encrypted Semantic Communications for Privacy Preserving

Bibliography

Appendix A

Index

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