1. Record Nr. UNINA9910466477103321

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Titolo	Big data analytics for connected vehicles and smart cities / / Bob McQueen
Pubbl/distr/stampa	Boston, Massachusetts : , : Artech House, , [2017] [Piscataqay, New Jersey] : , : IEEE Xplore, , [2017]
ISBN	1-63081-474-1
Descrizione fisica	1 online resource (xviii, 294 pages) : illustrations
Collana	Artech House power engineering series
Disciplina	388.0285
Soggetti	Intelligent transportation systems Transportation - Planning City planning - Technological innovations Big data Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro; Big Data Analytics for Connected Vehicles and Smart Cities; Contents; Preface; 1 Introduction; 1.1 Introduction; 1.2 Informational Objectives of This Chapter; 1.3 Word Cloud; 1.4 Background; 1.5 Why This Subject and Why Now?; 1.6 Intended Readership Groups for the Book; 1.7 Overview of Contents; References; 2 What Is Big Data?; 2.1 Informational Objectives of This Chapter; 2.2 Chapter Word Cloud; 2.3 Introduction; 2.4 Questions Instead of Answers?; 2.5 Overview of the Questions; 2.6 Safety-Related Questions; 2.7 Efficiency-Related Questions; 2.8 User Experience-Related Questions. 2.9 What Do We Do with the QuestionsReferences; 3 What Is Big Data?; 3.1 Informational Objectives of This Chapter; 3.2 Word Cloud; 3.3 Introduction; 3.4 How Is Big Data Measured?; 3.5 What Is Big Data?; 3.6 Challenges; 3.7 Big Data in Transportation; 3.8 Transportation Systems Management and Operations; References; 4 Connected and Autonomous Vehicles; 4.1 Informational Objectives; 4.2 Word Cloud; 4.3 Introduction; 4.4 What Is a Connected Vehicle?; 4.5 Connected Vehicle Challenges; 4.6 What Is an Autonomous Vehicle?; 4.7 Autonomous Vehicle Challenges.

4.8 Summary of the Differences between Connected and Autonomous Vehicles4.8 Connected and Autonomous Vehicles within a Smart City; 4.9 The Likely Impact of the Connected and the Autonomous Vehicle on Transportation; 4.10 Big Data and Connectivity; 4.11 Connected and Autonomous Vehicles within a Smart City; 4.12 The Likely Effect of Connected and Autonomous Vehicles on the Automotive Industry; 4.12 Summary; References; 5 Smart Cities; 5.1 Informational Objectives; 5.2 Word Cloud; 5.3 Introduction; 5.4 What Is a Smart City?; 5.5 Smart City Objectives; 5.6 Steps Toward a Smart City.
5.7 Smart City Frameworks5.8 Evaluating the Effects of Investments; 5.9 Smart City Challenges; 5.10 Smart City Opportunities; 5.11 Lessons Learned from the London Congestion Charge Project; 5.12 The Sentient City; 5.13 Summary; References; 6 What Are Analytics?; 6.1 Informational Objectives; 6.2 Introduction; 6.3 Word Cloud; 6.4 What Is an Analytic?; 6.5 Why Analytics Are Valuable; 6.6 Smart City Services Analytics; 6.7 Analytical Performance Management for a Smart City; 6.8 How Do Analytics and Data Lakes Fit Together?; 6.9 How to Identify Data Needs Associated with Analytics?; 6.10 Summary.

Sommario/riassunto

This practical new book presents the application of "big data" analytics to connected vehicles, smart cities, and transportation systems. This book enables transportation professionals to understand how data analytics can and will expand the design and engineering of connected vehicles and smart cities. Readers find extensive case studies and examples that provide a strong framework focusing on practical application of data sciences and analytic tools for actual projects in the field.n nBoth federal and private sector investments have a strong interest in the connected vehicle and this book discusses the impact this has on transportation. This book defines urban analytics and modeling, incentives and governance, mobility networks, energy networks, and other attributes and elements that craft a smart city. Readers learn how smart cities impact the application of advanced technologies in urban areas. This book explains how recently passed transportation legislation for the US has a specific emphasis on the use of data for performance management.