



# **Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing)**

*Waltenegus W. Dargie, Christian Poellabauer*

**Download now**

[Click here](#) if your download doesn't start automatically

# **Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing)**

*Waltenegus W. Dargie, Christian Poellabauer*

## **Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing)** Waltenegus W. Dargie, Christian Poellabauer

In this book, the authors describe the fundamental concepts and practical aspects of wireless sensor networks. The book provides a comprehensive view to this rapidly evolving field, including its many novel applications, ranging from protecting civil infrastructure to pervasive health monitoring. Using detailed examples and illustrations, this book provides an inside track on the current state of the technology. The book is divided into three parts. In Part I, several node architectures, applications and operating systems are discussed. In Part II, the basic architectural frameworks, including the key building blocks required for constructing large-scale, energy-efficient sensor networks are presented. In Part III, the challenges and approaches pertaining to local and global management strategies are presented – this includes topics on power management, sensor node localization, time synchronization, and security. At the end of each chapter, the authors provide practical exercises to help students strengthen their grip on the subject. There are more than 200 exercises altogether.

### **Key Features:**

- Offers a comprehensive introduction to the theoretical and practical concepts pertaining to wireless sensor networks
- Explains the constraints and challenges of wireless sensor network design; and discusses the most promising solutions
- Provides an in-depth treatment of the most critical technologies for sensor network communications, power management, security, and programming
- Reviews the latest research results in sensor network design, and demonstrates how the individual components fit together to build complex sensing systems for a variety of application scenarios
- Includes an accompanying website containing solutions to exercises  
([http://www.wiley.com/go/dargie\\_fundamentals](http://www.wiley.com/go/dargie_fundamentals))

This book serves as an introductory text to the field of wireless sensor networks at both graduate and advanced undergraduate level, but it will also appeal to researchers and practitioners wishing to learn about sensor network technologies and their application areas, including environmental monitoring, protection of civil infrastructure, health care, precision agriculture, traffic control, and homeland security.



[Download Fundamentals of Wireless Sensor Networks: Theory a ...pdf](#)



[Read Online Fundamentals of Wireless Sensor Networks: Theory ...pdf](#)

**Download and Read Free Online Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing) Waltenegus W. Dargie, Christian Poellabauer**

---

**From reader reviews:**

**Marcy Ontiveros:**

Information is provisions for folks to get better life, information nowadays can get by anyone from everywhere. The information can be a know-how or any news even restricted. What people must be consider when those information which is within the former life are difficult to be find than now is taking seriously which one would work to believe or which one typically the resource are convinced. If you find the unstable resource then you buy it as your main information it will have huge disadvantage for you. All of those possibilities will not happen with you if you take Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing) as the daily resource information.

**Helen Johnson:**

The reason? Because this Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing) is an unordinary book that the inside of the e-book waiting for you to snap the idea but latter it will surprise you with the secret the item inside. Reading this book close to it was fantastic author who write the book in such remarkable way makes the content on the inside easier to understand, entertaining technique but still convey the meaning totally. So , it is good for you for not hesitating having this any longer or you going to regret it. This amazing book will give you a lot of gains than the other book possess such as help improving your talent and your critical thinking approach. So , still want to delay having that book? If I were being you I will go to the guide store hurriedly.

**Richard Shumate:**

Do you have something that you want such as book? The book lovers usually prefer to select book like comic, small story and the biggest you are novel. Now, why not attempting Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing) that give your enjoyment preference will be satisfied simply by reading this book. Reading practice all over the world can be said as the means for people to know world far better then how they react in the direction of the world. It can't be claimed constantly that reading behavior only for the geeky man or woman but for all of you who wants to end up being success person. So , for all of you who want to start reading through as your good habit, you may pick Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing) become your personal starter.

**Robert Thomas:**

Reserve is one of source of know-how. We can add our knowledge from it. Not only for students but also native or citizen have to have book to know the up-date information of year to year. As we know those guides have many advantages. Beside all of us add our knowledge, can also bring us to around the world. With the book Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing) we can have more advantage. Don't you to definitely be creative people? To get

creative person must prefer to read a book. Simply choose the best book that suitable with your aim. Don't always be doubt to change your life with that book Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing). You can more appealing than now.

**Download and Read Online Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing) Waltenegus W. Dargie, Christian Poellabauer #YL451VE6DNH**

# **Read Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing) by Waltenegus W. Dargie, Christian Poellabauer for online ebook**

Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing) by Waltenegus W. Dargie, Christian Poellabauer Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing) by Waltenegus W. Dargie, Christian Poellabauer books to read online.

## **Online Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing) by Waltenegus W. Dargie, Christian Poellabauer ebook PDF download**

**Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing) by Waltenegus W. Dargie, Christian Poellabauer Doc**

**Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing) by Waltenegus W. Dargie, Christian Poellabauer MobiPocket**

**Fundamentals of Wireless Sensor Networks: Theory and Practice (Wireless Communications and Mobile Computing) by Waltenegus W. Dargie, Christian Poellabauer EPub**