



River Publishers Series in Communications and Networking

## Compressive Sensing for Wireless Communication: Challenges and Opportunities

### Authors:

Radha Sankararajan, SSN College of Engineering, India  
Hemalatha Rajendran, SSN College of Engineering, India  
Aasha Nandhini Sukumaran, SSN College of Engineering, India

**ISBN:** 9788793379855

**e-ISBN:** 9788793379862

**Available From:** September 2016

**Price:** € 85.00

### Description:

Compressed Sensing (CS) is a promising method that recovers the sparse and compressible signals from severely under-sampled measurements. CS can be applied to wireless communication to enhance its capabilities. As this technology is proliferating, it is possible to explore its need and benefits for emerging applications

Compressive Sensing for Wireless Communication provides:

- A clear insight into the basics of compressed sensing
- A thorough exploration of applying CS to audio, image and computer vision
- Different dimensions of applying CS in Cognitive radio networks
- CS in wireless sensor network for spatial compression and projection
- Real world problems/projects that can be implemented and tested
- Efficient methods to sample and reconstruct the images in resource constrained WMSN environment

This book provides the details of CS and its associated applications in a thorough manner. It lays a direction for students and new engineers and prepares them for developing new tasks within the field of CS. It is an indispensable companion for practicing engineers who wish to learn about the emerging areas of interest.

**Keywords:** Wireless sensor networks, compressed sensing, sparsity, signal recovery, image processing, audio, video, computer vision, wireless networks, cognitive radio

#### Denmark Head Office

Alsbergvej 10  
9260 Gistrup  
Denmark  
[www.riverpublishers.com](http://www.riverpublishers.com)  
Email: [info@riverpublishers.com](mailto:info@riverpublishers.com)

#### USA Office

Indianapolis, IN  
USA  
Tel.: +1-3176899634  
Email: [rajeev.prasad@riverpublishers.com](mailto:rajeev.prasad@riverpublishers.com)

#### UK Office

River Publishers  
Email: [philippa.jefferies@riverpublishers.com](mailto:philippa.jefferies@riverpublishers.com)