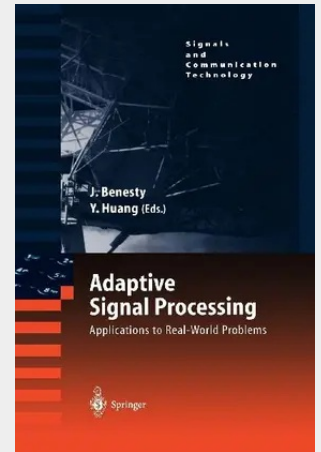


Adaptive Signal Processing

The goal of this book is to provide, for the first time, a reference to the most relevant applications of adaptive filtering techniques. Top researchers in the field contributed chapters addressing their specific topic of study. The topics are limited to those applications in acoustics, speech, wireless, and networking where research is still very active and open. The book is roughly organized into two parts. In the first part, several applications in acoustics and speech are developed. The second part focuses on wireless and networking applications. Some chapters are tutorial in nature, while others present new research ideas, and all have in common the use of adaptive algorithms to solve real-world problems.

By adaptive signal processing, we mean, in general, adaptive filtering. In known environments where we need to model, identify, or track time-varying channels, adaptive filtering has been proven to be an effective and powerful tool. As a result, this tool is now in use in many different fields. Since the invention, by Widrow and Ho in 1959, of one of the first adaptive filters, the so-called least-mean-square, many applications appeared to have the potential to use this fundamental concept. While the number of applications (using adaptive algorithms) has been (and keeps) flourishing with time, thanks to several successes, the need for more sophisticated adaptive algorithms became obvious as real-world problems are more complex and more demanding. Even though the theory of adaptive filtering is already a well-established topic in signal processing, new and improved concepts are discovered every year by researchers. Some of these recent approaches are discussed in this book. The goal of this book is to provide, for the first time, a reference to the hottest real-world applications where adaptive filtering techniques play an important role. To do so, we invited top researchers in different fields to contribute chapters addressing their specific topic of study. Thousands of pages would probably not be enough to describe all the practical applications utilizing adaptive algorithms. Therefore, we limited the topics to some important applications in acoustics, speech, wireless, and networking, where research is still very active and open.



179,98 €

168,21 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783642055072

Medium: Buch

ISBN: 978-3-642-05507-2

Verlag: Springer

Erscheinungstermin: 05.12.2010

Sprache(n): Englisch

Auflage: Softcover version of original
hardcover Auflage 2003

Serie: Signals and Communication
Technology

Produktform: Kartoniert

Gewicht: 569 g

Seiten: 356

Format (B x H): 155 x 235 mm

