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Yong Xiang
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Digital Audio Watermarking Fundamentals, Techniques and Challenges

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Digital Audio Watermarking

Fundamentals, Techniques and Challenges

 Springer

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To my beloved Shan, Angie, and Daniel.

—Yong Xiang

To my beloved ones.

—Guang Hua

To my parents and my beloved family.

—Bin Yan

Preface

Digital watermarking has been an active research topic for over two decades. This book focuses on digital watermarking in the audio domain. It takes a general and comprehensive perspective and introduces audio watermarking techniques and system frameworks developed over the past two decades for various applications. It covers the fundamentals of audio watermarking, including performance criteria, basic system structure, as well as classical system designs, followed by the latest developments and state-of-the-art techniques in the literature. Furthermore, the emerging topics of reversible audio watermarking and audio watermarking with cryptography are also introduced in this book with illustrative design examples based on the state-of-the-art techniques. This book could serve as a tutorial material for readers with general background knowledge in signal processing, multimedia security, or a reference material for experienced researchers in watermarking area.

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