

Preface

Due to wide range of digital watermarking applications in digital world, available digital watermarking books just concentrate on specific application of digital watermarking such as multimedia, document, and network. This book is written to cover all possible application of digital watermarking in digital world. For this purpose, the overall techniques and trends in each of the digital watermarking forms are discussed with simple and understandable language. Since digital watermarking has broad contribution in cybersecurity science, the authors believe that any sort of digital watermarking for digital contents requires a separate chapter for complete discussion. Therefore, every chapter of this book is dedicated to well-known application of digital watermarking in audio, speech, image, video, 3D graphic, natural language, text, software, XML data, relational database, ontology, network stream, DNA, Bitcoin, and hardware IPs.



This book is suitable for beginners who do not have any information about digital watermarking concepts. In order to motivate readers to select, familiar, and get some concepts of a desired watermarking field, this book is structured and organized in such a way that the reader has ability to only focus on a chapter. For more and deep concentration on details for that chapter, the reader must study state-of-the-art references in that chapter. For course work usage, the authors suggest

students to familiar with basic concepts of digital signal processing, natural language processing, software engineering, network engineering, machine learning, digital design, and cryptography subjects.

Although the authors have been attempted to provide the best suggestion for classification of techniques and trends in the beginning of each chapter, the authors declare that there is always improvement for classifying these techniques and trends. Therefore, any suggestion from audience for enhancing the book's structure and book's content will be most welcomed.

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Techniques and Trends

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