The demand for information security professionals and applications has been one of the fastest growing markets internationally. This book is addressed to professionals, students, researchers and engineers interested in theory and applications of multimedia security. By exploring the ideas of fragile fingerprinting and non-perfect secret sharing, the authors take a fresh approach to

1. Deliver a framework for Joint fingerprinting and decryption (JFD) in multicast environments with focus on traitor tracing.
2. Introduce methodologies for constructing collusion resistant semi-fragile fingerprints.
3. Provide efficient and illustrative algorithms for construction of anti-collusion codes (ACC) (a) By Edge coloring, (b) Using Hadamard 2-designs.
4. Explore the multi-faceted nature of a non-perfect secret sharing algorithm called MIX-SPLIT and its properties of *Association, Inheritance, Anonymity with traceability* and *Closure*.
5. Present several practical application scenarios such as the protection and tracking of highly sensitive medical records, selective access of strategic maps and distributed secure storage of biometric PINs.

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ISBN: 978-3-8364-3638-0

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Balancing Secrecy, Privacy and Traceability

VDM Verlag Dr. Müller