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Autore	Zivic Natasa
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Nota di contenuto	Front matter -- Abstract -- Table of Contents -- 1. Introduction -- 2. Fundamentals -- 3. Related Work -- 4. Soft Input Hard Verification -- 5. Applications of Soft Input Bit Inversion -- 6. Soft Verification of the Message Authentication Codes -- 7. Security Aspects of Soft Input Soft Verification -- 8. Soft Output of Soft Input Soft Verification -- 9. Applications of Soft Input Soft Verification -- 10. Summary and Future Work -- Epilogue -- Works Cited -- List of Abbreviations
Sommario/riassunto	This book presents the benefits of the synergetic effect of the combination of coding and cryptography. It introduces new directions for the interoperability between the components of a communication system. Coding and cryptography are standard components in today's distributed systems. The integration of cryptography into coding aspects is very interesting, as the usage of cryptography will be common use, even in industrial applications. The book is based on new developments of coding and cryptography, which use real numbers to express reliability values of bits instead of binary values 0 and 1. The presented methods are novel and designed for noisy communication, which doesn't allow the successful use of cryptography. The rate of successful verifications is improved essentially not only for standard or "hard" verification, but even more after the introduction of "soft" verification. A security analysis shows the impact on the security. Information security and cryptography follow the late developments of

communication theory by changing from "hard" to "soft", which results in much better results.

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