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	Nota di contenuto	1. What are Data Breaches? -- 2. Brief History of Cryptography -- 3. The Importance of Random Numbers -- 4. Hashing and Hashed Message Authentication Codes -- 5. Safely Storing Passwords -- 6. Symmetric Encryption -- 7. Asymmetric Encryption -- 8. Digital Signatures -- 9. Hybrid Encryption -- 10. Key Storage and Azure Key Vault -- 11. Azure Key Vault Usage Patterns -- 12. Final Summary.
	Sommario/riassunto	Benefit from Microsoft's robust suite of security and cryptography primitives to create a complete, hybrid encryption scheme that will protect your data against breaches. This highly practical book teaches you how to use the .NET encryption APIs and Azure Key Vault, and how they can work together to produce a robust security solution. Applied Cryptography in .NET and Azure Key Vault begins with an introduction to the dangers of data breaches and the basics of cryptography. It then takes you through important cryptographic techniques and practices, from hashing and symmetric/asymmetric encryption, to key storage mechanisms. By the end of the book, you'll know how to combine these cryptographic primitives into a hybrid encryption scheme that you can

use in your applications. Author Stephen Haunts brings 25 years of software development and security experience to the table to give you the concrete skills, knowledge, and code you need to implement the latest encryption standards in your own projects. What You'll Learn: Get an introduction to the principles of encryption Understand the main cryptographic protocols in use today, including AES, DES, 3DES, RSA, SHAx hashing, HMACs, and digital signatures Combine cryptographic techniques to create a hybrid cryptographic scheme, with the benefits of confidentiality, integrity, authentication, and non-repudiation Use Microsoft's Azure Key Vault to securely store encryption keys and secrets Build real-world code to use in your own projects This book is for software developers with experience in .NET and C#. No prior knowledge of encryption and cryptographic principles is assumed. Stephen Haunts is a software developer with experience across industry verticals, including game development, financial services, insurance, and healthcare. He specializes in security and cryptography and regularly speaks and presents at conferences and user groups about secure coding in .NET.