1. Record Nr. UNINA9910300758703321 Autore Pathak Nishith Titolo IoT, AI, and Blockchain for .NET: Building a Next-Generation Application from the Ground Up / / by Nishith Pathak, Anurag Bhandari Berkeley, CA:,: Apress:,: Imprint: Apress,, 2018 Pubbl/distr/stampa 1-4842-3709-9 **ISBN** Edizione [1st ed. 2018.] 1 online resource (XXI, 308 p. 149 illus.) Descrizione fisica 006.3 Disciplina Soggetti Microsoft software Microsoft .NET Framework Computer communication systems Artificial intelligence Microsoft and .NET Computer Communication Networks Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. 1. The Artificial Intelligence 2.0 Revolution -- 2. Understanding the Nota di contenuto Internet of Things and Azure IoT Suite -- 3. Creating Smart IoT Applications -- 4. Understanding Cognitive APIs -- 5. Consuming Microsoft Cognitive APIs -- 6. Building Smarter Applications Using Cognitive APIs -- 7. Understanding Blockchain -- 8. Implementing Blockchain as a Service -- 9. Capturing, Analyzing, and Visualizing Real-time Data -- 10. Making Predictions with Machine Learning. Create applications using Industry 4.0. Discover how artificial Sommario/riassunto intelligence (AI) and machine learning (ML) capabilities can be enhanced using the Internet of things (IoT) and secured using Blockchain, so your latest app can be not just smarter but also more connected and more secure than ever before. This book covers the latest easy-to-use APIs and services from Microsoft, including Azure IoT, Cognitive Services APIs, Blockchain as a Service (BaaS), and Machine Learning Studio. As you work through the book, you'll get hands-on experience building an example solution that uses all of these technologies—an IoT suite for a

smart healthcare facility. Hosted on Azure and networked using Azure

IoT, the solution includes centralized patient monitoring, using Cognitive Services APIs for face detection, recognition, and tracking. Blockchain is used to create trust-based security and inventory management. Machine learning is used to create predictive solutions to proactively improve quality of life. By the end of the book, you'll be confident creating richer and smarter applications using these technologies. What You'll Learn: Know the technologies underpinning Industry 4.0 and AI 2.0 Develop real-time solutions using IoT in Azure Bring the smart capabilities of Al 2.0 into your application using a simple API call Host and manage your solution on Azure Understand Blockchain as a Service Capture and analyze data on the fly Make predictions using existing data This book is for novice and intermediate .NET developers and architects who want to learn what it takes to create a modern or next-generation application. Nishith Pathak is Vice President at Accenture Technology Labs, a Microsoft Regional Director (RD), and an artificial intelligence Microsoft MVP. He helps Fortune 100 companies design and architect next-generation solutions that incorporate AI, ML, cognitive services, Blockchain, and more. He sits on several technical advisory boards across the globe, and is author of multiple books, most recently Artificial Intelligence for .NET. He is an internationally acclaimed speaker on technologies such as AI and Blockchain, and regularly speaks at various technical conferences. Anurag Bhandari is Senior Researcher at Accenture Technology Labs, where he designs next-generation AI, ML, and IoT solutions for clients. He is a member of the Association of Computing Machinery (ACM), and regularly speaks at research and tech conferences. He also specializes in mobile and web development, and lives on the leading edge of these technologies. He is an ardent open-source evangelist whose love for free software helped him found the Granular Linux project 11 years ago.