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Titolo	Hands-on artificial intelligence for IoT // Dr. Amita Kapoor
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ISBN	1-83546-296-0
Edizione	[Second edition.]
Descrizione fisica	1 online resource (472 pages) : color illustrations
Disciplina	004.67
Soggetti	Internet of things Artificial intelligence Machine learning
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>Master AI and IoT integration, from fundamentals to advanced techniques, and revolutionize your approach to building intelligent, data-driven solutions across industries</p> <p>Key Features</p> <ul style="list-style-type: none"> Leverage the power of Python libraries such as TensorFlow and Keras to work with real-time IoT data Enhance your IoT solutions with advanced AI techniques, including deep learning, optimization, and generative adversarial networks Gain practical insights through industry-specific IoT case studies in manufacturing, smart cities, and automation <p>Purchase of the print or Kindle book includes a free PDF eBook</p> <p>Book Description</p> <p>Transform IoT devices into intelligent systems with this comprehensive guide by Amita Kapoor, Chief AI Officer at Tipz AI. Drawing on 25 years of expertise in developing intelligent systems across industries, she demonstrates how to harness the combined power of artificial intelligence and IoT technology. A pioneer in making AI and neuroscience education accessible worldwide, Amita guides you through creating smart, efficient systems that leverage the latest advances in both fields. This new edition is updated with various optimization techniques in IoT used for enhancing efficiency and performance. It introduces you to cloud platforms such as Platform as a Service (PaaS) and Infrastructure as a Service (IaaS) for analyzing data generated using IoT devices. You'll learn about machine learning</p>

algorithms, deep learning techniques, and practical applications in real-world IoT scenarios and advance to creating AI models that work with diverse data types, including time series, images, and audio. You'll also harness the power of widely used Python libraries, TensorFlow and Keras, to build a variety of smart AI models. By the end of the book, you'll emerge as a master of AI-driven IoT, armed with invaluable experience in optimizing IoT devices, boosting their performance, and integrating AI algorithms to make intelligent decisions. What you will learn

- Integrate AI and IoT for enhanced device intelligence
- Understand how to build scalable and efficient IoT systems
- Master both supervised and unsupervised machine learning techniques for processing IoT data
- Explore the full potential of deep learning in IoT applications
- Discover AI-driven strategies to optimize IoT system efficiency
- Implement real-world IoT projects that leverage AI capabilities
- Improve device performance and decision-making using AI algorithms

Who this book is for

This book is for IoT developers, engineers, and tech enthusiasts, particularly those with a background in Python, looking to integrate artificial intelligence and machine learning into IoT systems. Python developers eager to apply their knowledge in new, innovative ways will find it useful. It's also an invaluable guide for anyone with a foundational understanding of IoT concepts ready to take their skills to the next level and shape the future of intelligent devices.
