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Descrizione fisica	1 online resource (228 pages)
Collana	Signals and Communication Technology, , 1860-4870
Disciplina	338.9270285
Soggetti	Telecommunication Artificial intelligence Sustainability Cooperating objects (Computer systems) Communications Engineering, Networks Artificial Intelligence Cyber-Physical Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Introduction to AI and Sustainability -- Challenges surrounding AI software development -- Strategies for building efficient AI systems -- Ethical considerations in AI development -- AI and Energy -- AI and Climate Change -- AI and Natural Resource Management -- AI and Sustainable Agriculture -- AI and Sustainable Transport -- AI and Sustainable Cities -- AI and Sustainable Business -- Methods for ensuring data privacy and security in AI software -- Case studies -- Future directions for sustainable AI software development -- Conclusion.
Sommario/riassunto	This book gives readers the tools to craft AI systems that don't just thrive today, but endure sustainably into the future. Whether a trailblazer or an aspiring innovator, this book enables readers to resonate with the ambitions of software developers, data scientists, and AI practitioners. The author covers the latest techniques and best practices for energy efficiency, reducing carbon footprints, and ensuring fair and ethical AI. The book also addresses important issues such as AI governance, managing risks, and ensuring transparency.

Topics covered include understanding the relationship between AI and sustainable development, strategies for building efficient AI systems, and ethical considerations in AI development, among others. The author includes case studies of companies and organizations that have successfully implemented sustainable AI software development practices. Therefore, this book will be of interest to AI practitioners, academics, researchers, and lecturers in computer science, artificial intelligence, machine learning and data sciences.

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