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Sommario/riassunto	A practical roadmap to the application of artificial intelligence and machine learning to power systems In an era where digital technologies are revolutionizing every aspect of power systems, Smart Cyber-Physical Power Systems, Volume 2: Solutions from Emerging Technologies shifts focus to cutting-edge solutions for overcoming the challenges faced by cyber-physical power systems (CPSs). By leveraging emerging technologies, this volume explores how innovations like artificial intelligence, machine learning, blockchain, quantum computing, digital twins, and data analytics are reshaping the energy sector. This volume delves into the application of AI and machine learning in power system optimization, protection, and forecasting. It also highlights the transformative role of blockchain in secure energy trading and digital twins in simulating real-time power system operations. Advanced big data techniques are presented for enhancing

system planning, situational awareness, and stability, while quantum computing offers groundbreaking approaches to solving complex energy problems. For professionals and researchers eager to harness cutting-edge technologies within smart power systems, Volume 2 proves indispensable. Filled with numerous illustrations, case studies, and technical insights, it offers forward-thinking solutions that foster a more efficient, secure, and resilient future for global energy systems, heralding a new era of innovation and transformation in cyber-physical power networks. Welcome to the exploration of Smart Cyber-Physical Power Systems (CPPSs), where challenges are met with innovative solutions, and the future of energy is shaped by the paradigms of AI/ML, Big Data, Blockchain, IoT, Quantum Computing, Information Theory, Edge Computing, Metaverse, DevOps, and more.

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