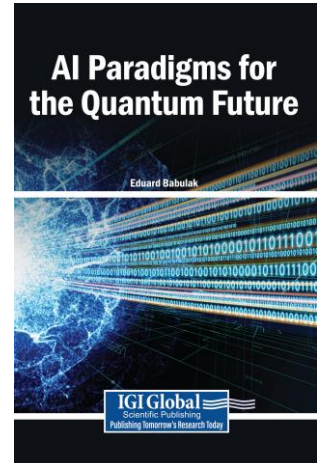


AI Paradigms for the Quantum Future:

Eduard Babulak, (National Science Foundation, USA)



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As AI and quantum computing advance, their integration reshapes the future of computation, decision-making, and innovation. New theories, methodologies, and applications emerge at the intersection of these transformative technologies. By leveraging the computational power of quantum systems alongside the adaptive and predictive capabilities of AI, researchers and practitioners may develop innovative approaches to complex problems beyond the reach of classical computing. This landscape presents opportunities to accelerate scientific discovery, optimize large-scale systems, and redefine the boundaries of intelligent technologies.

AI Paradigms for the Quantum Future explores the relationship between AI and quantum computing, focusing on how their integration can create new computational models, algorithms, and intelligent systems. It examines the theories, technologies, opportunities, and challenges associated with developing AI paradigms that leverage quantum capabilities to solve complex problems and drive future innovation. This book covers topics such as cyberspace, industrial engineering, and quantum computing, and is a useful resource for engineers, academicians, researchers, and scientists.

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