

# Innovations and Applications of AI, IoT, and Cognitive Technologies

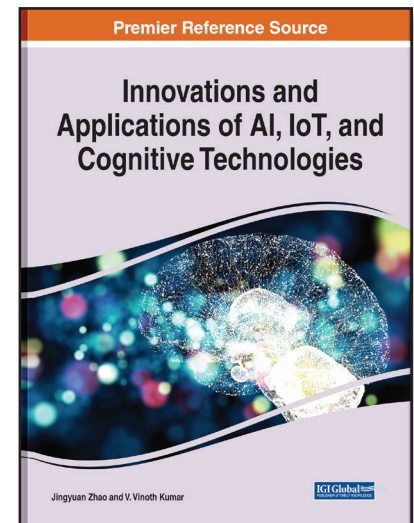
Part of the Advances in Computational Intelligence and Robotics Book Series

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## Description:

Recently, artificial intelligence (AI), the internet of things (IoT), and cognitive technologies have successfully been applied to various research domains, including computer vision, natural language processing, voice recognition, and more. In addition, AI with IoT has made a significant breakthrough and technical direction in achieving high efficiency and adaptability in a variety of new applications. On the other hand, network design and optimization for AI applications addresses a complementary topic, namely the support of AI-based systems through novel networking techniques, including new architectures, as well as performance models for IoT systems. IoT has paved the way to a plethora of new application domains, at the same time posing several challenges as a multitude of devices, protocols, communication channels, architectures, and middleware exist. Big data generated by these devices calls for advanced learning and data mining techniques to effectively understand, learn, and reason with this volume of information, such as cognitive technologies. Cognitive technologies play a major role in developing successful cognitive systems which mimic “cognitive” functions associated with human intelligence, such as “learning” and “problem solving.” Thus, there is a continuing demand for recent research in these two linked fields.

**Innovations and Applications of AI, IoT, and Cognitive Technologies** discusses the latest innovations and applications of AI, IoT, and cognitive-based smart systems. The chapters cover the intersection of these three fields in emerging and developed economies in terms of their respective development situation, public policies, technologies and intellectual capital, innovation systems, competition and strategies, marketing and growth capability, and governance and relegation models. These applications span areas such as healthcare, security and privacy, industrial systems, multidisciplinary sciences, and more. This book is ideal for technologists, IT specialists, policymakers, government officials, academics, students, and practitioners interested in the experiences of innovations and applications of AI, IoT, and cognitive technologies.



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