An amazing collection of state-of-the-art papers on the topic of intelligent, adaptive systems has been assembled by the editor, Raymond Chiong of Swinburne University of Technology (Sarawak Campus), Malaysia in this exciting special volume. He has selected the works of a truly global group of talented researchers. In addition, he has focused on taking a large swath of presentations in order to maximize the benefit of this volume to the widest possible audience. Raymond has merged cutting-edge science, novel and practical applications, methodology analysis, and social commentary into a cohesive unit that is destined to anchor the research of young investigators for many years to come.

A recurring theme throughout this compilation of twelve chapters is the incorporation of adaptation with intelligent learning, evolutionary, and collective systems. The first four chapters deal in various ways with artificial neural networks that learn and adapt based on experience and data tendencies. The next five chapters focus on evolutionary approaches applied in general to problems of optimization of performance and system efficiency. The remaining three chapters are concerned with collective behaviors, where diffusion and emergence in social networks, automatic programming based on ant colony system, and efficient management of manufacturing systems using a pheromone approach are discussed.

This interesting collection of timely contributions is an exceptional blend of current theoretical research and valuable applications to the solution of real world problems. For a discipline to remain relevant, it must nourish innovative research yet provide tools for improving the quality of life and sustainability of our civilization. This new book contains an excellent balance of these two objectives. The common theme of adaptability throughout diverse topics will likely provide considerable interest among practitioners in intelligent systems.

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