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Nota di contenuto	Sport and Science -- Knowledge Discovery in Sport -- Pervasive Computing in Sport -- Human in Sports -- Principles of Human Movement -- Sports Training and Computational Intelligence -- Theory of Sports Training -- Applications of Computational Intelligence in Sports -- Generating Training Plans Based on Existing Sports Activities -- Adaptation of Training Plans -- Batminer for Identifying the Characteristics of Athletes in Training -- Visualization of sports activities created by wearable mobile devices -- Sports nutrition.
Sommario/riassunto	This book presents recent research on computational intelligence (CI) algorithms in the field of sport. In the modern age, information technologies have greatly reduced the need for human effort in the carrying out of many daily tasks. These technologies have radically influenced the lives of humans, and the information society in general. Unfortunately, these advances have brought with them certain negative effects, including the encouragement of sedentary lifestyles and the attendant health problems such as obesity that these engender. Other modern maladies, chiefly cardiovascular disease, diabetes, and cancer,

have also been on the increase. Today, sports are virtually the only activity that still connects modern humans to their original lifestyle, which was based on physical motion. This book tears familiarizing sports scientists with the foundations of computational intelligence, while at the same time presenting the problems that have arisen in the training domain to computer scientists. Lastly, the book proposes the use of an Artificial Sports Trainer designed to enhance the training of modern athletes who cannot afford the considerable expense of hiring a human personal trainer. This intelligent system can monitor performance and design and direct appropriate future training, thus promoting both healthy lifestyles and competitive success in athletes.