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Titolo	Challenges and Trends in Multimodal Fall Detection for Healthcare / / edited by Hiram Ponce, Lourdes Martínez-Villaseñor, Jorge Brieva, Ernesto Moya-Albor
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Nota di contenuto	Challenges and Solutions on Human Fall Detection and Classication -- Open Source Implementation for Fall Classication and Fall Detection Systems -- Detecting Human Activities based on a Multimodal Sensor Data Set using a Bidirectional Long Short-Term Memory Model: A Case Study -- Approaching Fall Classication using the UP-Fall Detection Dataset: Analysis and Results from an International Competition -- Reviews and Trends on Multimodal Healthcare -- A Novel Approach for Human Fall Detection and Fall Risk Assessment.
Sommario/riassunto	This book focuses on novel implementations of sensor technologies, artificial intelligence, machine learning, computer vision and statistics for automated, human fall recognition systems and related topics using data fusion. It includes theory and coding implementations to help readers quickly grasp the concepts and to highlight the applicability of this technology. For convenience, it is divided into two parts. The first part reviews the state of the art in human fall and activity recognition systems, while the second part describes a public dataset especially

curated for multimodal fall detection. It also gathers contributions demonstrating the use of this dataset and showing examples. This book is useful for anyone who is interested in fall detection systems, as well as for those interested in solving challenging, signal recognition, vision and machine learning problems. Potential applications include health care, robotics, sports, human–machine interaction, among others.