

# Preface

Prevention and treatment of common and widespread chronic diseases is a challenge in any modern society and vitally important for health maintenance in aging societies. Capturing biometric data is a cornerstone for any analysis and treatment strategy. Latest advances in sensor technology allow accurate data measurement in a nonintrusive way.

In many cases, it is necessary to provide online monitoring and real-time data capturing to support patients' prevention plans or to allow medical professionals to access the current status. Different communication standards are required to push sensor data and to store and analyze them on different mobile platforms.

The objective of this book is to show new and innovative approaches dedicated to biometric data capture and analysis in a nonintrusive way maintaining mobility. Examples can be found in human centered ambient intelligence or even in methodologies applied in automotive or home automation.

The book is organized in five parts:

- ICT for Health Care
- Embedded Systems for Biometric Data Acquisition
- Biometric Data in Automotive and Home Applications
- Biometric Data Analysis of Cardiac Signals
- Gait Analysis

The book presents a selection of papers presented in the international workshop "Mobile Networks for Biometric Data Analysis" held in Ancona, Italy, during October 30–31, 2014, organized by the Università Politecnica delle Marche (Italy), Hochschule Konstanz (Germany), Hochschule Reutlingen (Germany) approved and financed by DAAD German Academic Exchange Service.

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