

Preface

Improving the quality of life for the disabled and the increasing fraction of elderly people is becoming more and more of an essential task for today's European societies, as Europe and industrialized countries worldwide are confronted with a demographic shift. The consequence of increasing life expectancy and decreasing birth rates is an EU population that is becoming increasingly older. On the social side of this issue, it is important for all these people having the need to be supported in their daily-life-activities to remain integrated in social life - despite their age and existing disabilities. On the economical side, ageing has enormous implications, since not only the income side of social schemes is affected, but also expenditures: health care systems for instance, are concerned. Facing these challenges of ageing societies there exist areas of opportunity, where technological and social-economic innovation can enhance the quality of life of older and impaired people, mitigate the economic problems of an ageing population, and create new economic and business opportunities.

Ambient Assisted Living (AAL) includes assistance to carry out daily activities, health and activity monitoring, enhancing safety and security, getting access to social, medical and emergency systems, and facilitating social contacts. Receiving social and/or medical support in various new intelligent ways consequently contributes to independent living and quality of life for many elderly and disabled people. Overall, AAL can improve the quality of life of elderly people at home and reduces the need of caretakers, personal nursing.

The book entitled "Wireless Technologies for Ambient Assisted Living and Health Care: Systems and Applications" provides a compendium of terms, definitions and explanations of concepts, processes and acronyms. Additionally, this volume features short chapters authored by leading experts offering an in-depth description of key terms and concepts related to different areas, issues and trends in various areas of Wireless Technologies for Ambient Assisted Living and Health Care. The book focuses on emerging wireless technologies and innovative wireless solutions for smart home environments.

The topics of this book covers useful areas of general knowledge including Information and Communication Technologies related to Health, New Developments in Distributed Applications and Interoperable Systems, Applications and Services, Wireless Technologies and Architectures for Health Monitoring Systems, Wireless Communication and Sensor Networks in Smart Living Space.

This book will be an excellent source of comprehensive knowledge and literature on the topic of Wireless Computing in the area of Health Care and Assisted Living.

All of us who worked on the book hope that readers will find it useful.

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