# Contents

1 **Introduction** ............................................................... 1  
   Andrew Sixsmith and Gloria Gutman

2 **Technology and the Challenge of Aging** .......................... 7  
   Andrew Sixsmith

3 **Older Adults and the Adoption of Healthcare Technology:  
   Opportunities and Challenges** ....................................... 27  
   Sara Czaja, Scott Beach, Neil Charness, and Richard Schulz

4 **Assistive Technologies: Ethical Practice,  
   Ethical Research, and Quality of Life** ............................ 47  
   Andrew Eccles, Leela Damodaran, Wendy Olphert, Irene Hardill,  
   and Mary Gilhooly

5 **Expanding the Technology Safety Envelope  
   for Older Adults to Include Disaster Resilience** .................. 69  
   Maggie Gibson, Gloria Gutman, Sandra Hirst, Kelly Fitzgerald,  
   Rory Fisher, and Robert Roush

6 **Measuring the Effectiveness of Assistive Technology  
   on Active Aging: Capturing the Perspectives of Users** ............ 95  
   Jeffrey Jutai and Kenneth Southall

7 **Using Technology to Support People with Dementia** .......... 105  
   Gail Mountain

8 **Ambient Assisted Living Systems in Real-Life Situations:  
   Experiences from the SOPRANO Project** ............................ 123  
   Ilse Bierhoff, Sonja Müller, Sandra Schoenrade-Sproll,  
   Sarah Delaney, Paula Byrne, Vesna Dolničar, Babis Magoutas,  
   Yiannis Verginadis, Elena Avatangelou, and Claire Huijnen
9  **The Virtual Environment in Communication of Age-Friendly Design** ................................................................. 155  
Eunju Hwang, Andrew Park, Andrew Sixsmith, and Gloria Gutman

10 **Technology and Fun for a Happy Old Age** ........................................... 169  
Arlene Astell

11 **Videoconferencing and Social Engagement for Older Adults** ................................................................. 189  
Robert Beringer and Andrew Sixsmith

12 **International Initiatives in Technology and Aging** ......................... 201  
Andrew Sixsmith, Maria Carrillo, David Phillips, Peter Lansley, and Ryan Woolrych

Index .................................................................................................................................................................. 223