Contents

Playful Interfaces: Introduction and History ................... 1
Anton Nijholt

Part I Public and Mobile Entertainment

Public Systems Supporting Noninstrumented Body-Based
Interaction ................................................................. 25
Dimitris Grammenos, Giannis Drossis and Xenophon Zabulis

Playing with the Environment ........................................ 47
Pedro Centieiro, Teresa Romão and A. Eduardo Dias

Designing Mobile and Ubiquitous Games and Playful Interactions ... 71
Paul Coulton

Part II Indoor and Outdoor Playgrounds

Interactive Playgrounds for Children ................................. 99
Ronald Poppe, Robby van Delden, Alejandro Moreno
and Dennis Reidsma

Designing Interactive Outdoor Games for Children ................ 119
Iris Soute and Panos Markopoulos

Smart Ball and a New Dynamic Form of Entertainment .............. 141
Sachiko Kodama, Toshiki Sato and Hideki Koike
Part III  Games for Change, Personalization, and Teaching

Games for Change: Looking at Models of Persuasion Through the Lens of Design ................................................. 163
Alissa N. Antle, Joshua Tanenbaum, Anna Macaranas and John Robinson

Individual and Collaborative Personalization in a Science Museum . . . 185
Betsy van Dijk, Andreas Lingnau, Geert Vissers and Hub Kockelkorn

NoProblem! A Collaborative Interface for Teaching Conversation Skills to Children with High Functioning Autism Spectrum Disorder ................................................................. 209
Massimo Zancanaro, Leonardo Giusti, Nirit Bauminger-Zviely, Sigal Eden, Eynat Gal and Patrice L. Weiss

Part IV  Health and Sports

Designing for Social and Physical Interaction in Exertion Games . . . . . 227
Florian ‘Floyd’ Mueller, Martin R. Gibbs and Frank Vetere

Designing Games to Discourage Sedentary Behaviour ..................... 253
Regan L. Mandryk, Kathrin M. Gerling and Kevin G. Stanley

Part V  Learning by Creating

Playing in the Arcade: Designing Tangible Interfaces with MaKey MaKey for Scratch Games .................................. 277
Eunkyoung Lee, Yasmin B. Kafai, Veena Vasudevan and Richard Lee Davis

Playful Creativity: Playing to Create Games on Surfaces ............... 293
Alejandro Catala, Javier Jaen, Patricia Pons and Fernando Garcia-Sanjuan

Paulo Blikstein
Playful User Interfaces
Interfaces that Invite Social and Physical Interaction
Nijholt, A. (Ed.)
2014, X, 352 p. 129 illus., 122 illus. in color., Hardcover