Contents

## Part I  Biometrics

1. Biometrics Principles and Important Concerns 3  
   Khalid Saeed

2. Face Recognition in Unconstrained Environment 21  
   Przemysław Kocjan and Khalid Saeed

3. Iris Pattern Recognition with a New Mathematical Model to Its Rotation Detection 43  
   Krzysztof Misztal, Emil Saeed, Jacek Tabor, and Khalid Saeed

4. Human Identification by Vascular Patterns 67  
   Jan Kosmala and Khalid Saeed

5. A Study on Touch Screen Devices: User Authentication Problems 89  
   Marcin Rogowski and Khalid Saeed

6. New Proposals for Biometrics Using Eyes 113  
   Nobuyuki Nishiuchi and Masayuki Daikoku

7. Local Texture Descriptors on Biometric Detection: New Local Quaternary Pattern Descriptors and Case Study on Eye Detection 129  
   Jiayu Gu and Chengjun Liu

8. Chaotic Neural Network and Multidimensional Data Analysis in Biometric Applications 153  
   Kushan Ahmadian and Marina Gavrilova

## Part II  Kansei Engineering

9. Introduction to Kansei Engineering 173  
   Tomomasa Nagashima
10 Human Being and Kansei Engineering .......................... 177
Yoshio Shimizu

11 Concepts of Kansei and Aesthetic Thoughts ....................... 191
Tomomasa Nagashima, Yoshifumi Okada, and Yuzuko Nagashima

12 Kansei Measurement in Cooperative Development
Techniques ............................................................. 211
Masayoshi Kamijo and Yoshio Shimizu

13 Information Theoretic Methodology for Kansei Engineering:
Kansei Channel and SPRT ............................................. 233
Tetsuo Hattori and Hiromichi Kawano

14 Kansei Engineering and Service Engineering ....................... 259
Takashi Uozumi
Biometrics and Kansei Engineering
Saeed, K.; Nagashima, T. (Eds.)
2012, XII, 276 p., Hardcover
ISBN: 978-1-4614-5607-0