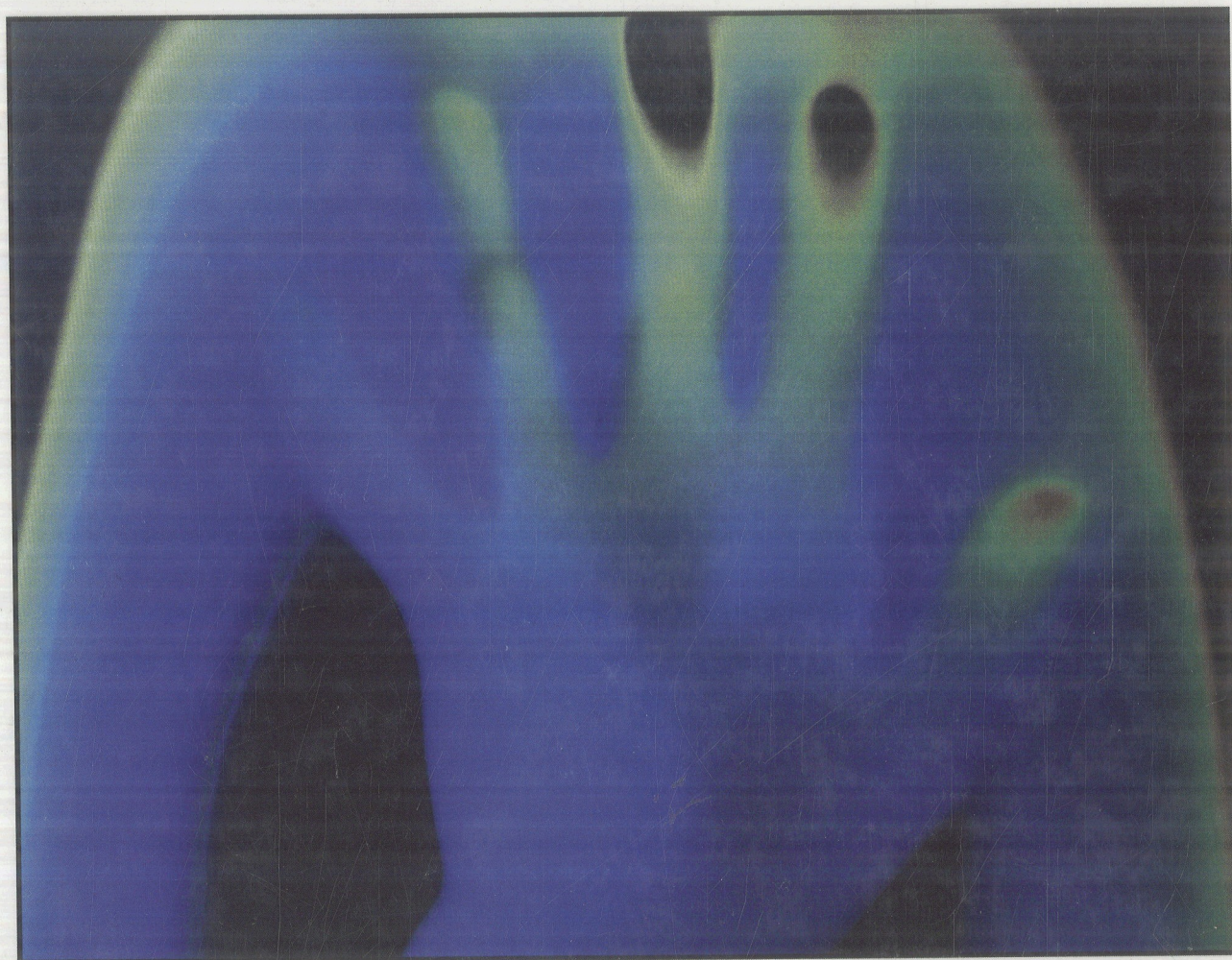


PREMIER REFERENCE SOURCE

BEHAVIORAL BIOMETRICS FOR HUMAN IDENTIFICATION

Intelligent Applications



Liang Wang & Xin Geng

Table of Contents

Foreword	xv
Preface	xvii
Acknowledgment.....	xxiii
 Chapter 1	
Taxonomy of Behavioural Biometrics	1
<i>Roman V. Yampolskiy, University of Louisville, USA</i>	
<i>Venu Govindaraju, University at Buffalo, USA</i>	
 Chapter 2	
Security Evaluation of Behavioral Biometric Systems.....	44
<i>Olaf Henniger, Fraunhofer Institute for Secure Information Technology, Germany</i>	
 Chapter 3	
Performance Evaluation of Behavioral Biometric Systems.....	57
<i>F. Cherifi, University of Caen, France</i>	
<i>B. Hemery, University of Caen, France</i>	
<i>R. Giot, University of Caen, France</i>	
<i>M. Pasquet, University of Caen, France</i>	
<i>C. Rosenberger, University of Caen, France</i>	
 Chapter 4	
Individual Identification from Video Based on “Behavioural Biometrics”	75
<i>Y. Pratheepan, University of Ulster, UK</i>	
<i>J.V. Condell, University of Ulster, UK</i>	
<i>G. Prasad, University of Ulster, UK</i>	
 Chapter 5	
Behavioral Biometrics: A Biosignal Based Approach	101
<i>Kenneth Revett, University of Westminster, UK</i>	

Chapter 6

Gabor Wavelets in Behavioral Biometrics.....	121
<i>M. Ashraf ul Amin, City University of Hong Kong, Hong Kong</i>	
<i>Hong Yan, City University of Hong Kong, Hong Kong</i>	

Chapter 7

Gait Recognition and Analysis.....	151
<i>Shiqi Yu, Chinese Academy of Sciences/The Chinese University of Hong Kong, China</i>	
<i>Liang Wang, The University of Melbourne, Australia</i>	

Chapter 8

Multilinear Modeling for Robust Identity Recognition from Gait	169
<i>Fabio Cuzzolin, Oxford Brookes University, UK</i>	

Chapter 9

Gait Feature Fusion using Factorial HMM.....	189
<i>Jimin Liang, Xidian University, China</i>	
<i>Changhong Chen, Xidian University, China</i>	
<i>Heng Zhao, Xidian University, China</i>	
<i>Haihong Hu, Xidian University, China</i>	
<i>Jie Tian, Xidian University, China</i>	

Chapter 10

Mouse Dynamics Biometric Technology.....	207
<i>Ahmed Awad E. Ahmed, University of Victoria, Canada</i>	
<i>Issa Traore, University of Victoria, Canada</i>	

Chapter 11

Activity and Individual Human Recognition in Infrared Imagery.....	224
<i>Bir Bhanu, University of California - Riverside, USA</i>	
<i>Ju Han, University of California - Riverside, USA</i>	

Chapter 12

Gaze Based Personal Identification	237
<i>Clinton Fookes, Queensland University of Technology, Australia</i>	
<i>Anthony Maeder, CSIRO ICT Centre, Australia</i>	
<i>Sridha Sridharan, Queensland University of Technology, Australia</i>	
<i>George Mamic, Queensland University of Technology, Australia</i>	

Chapter 13

Speaker Verification and Identification	264
<i>Minho Jin, Korea Advanced Institute of Science and Technology, Republic of Korea</i>	
<i>Chang D. Yoo, Korea Advanced Institute of Science and Technology, Republic of Korea</i>	

Chapter 14	
Visual Attention for Behavioral Biometric Systems	290
<i>Concetto Spampinato, University of Catania, Italy</i>	
Chapter 15	
Statistical Features for Text-Independent Writer Identification	317
<i>Zhenan Sun, NLPR, CAS, China</i>	
<i>Bangyu Li, NLPR, CAS, China</i>	
<i>Tieniu Tan, NLPR, CAS, China</i>	
Chapter 16	
Keystroke Biometric Identification and Authentication on Long-Text Input	342
<i>Charles C. Tappert, Pace University, USA</i>	
<i>Mary Villani, Pace University, USA</i>	
<i>Sung-Hyuk Cha, Pace University, USA</i>	
Chapter 17	
Secure Dynamic Signature-Crypto Key Computation.....	368
<i>Andrew Teoh Beng Jin, Yonsei University, Korea</i>	
<i>Yip Wai Kuan, Multimedia University, Malaysia</i>	
Chapter 18	
Game Playing Tactic as a Behavioral Biometric for Human Identification.....	385
<i>Roman V. Yampolskiy, University of Louisville, USA</i>	
<i>Venu Govindaraju, University at Buffalo, USA</i>	
Chapter 19	
Multimodal Biometrics Fusion for Human Recognition in Video.....	414
<i>Xiaoli Zhou, University of California - Riverside, USA</i>	
<i>Bir Bhanu, University of California - Riverside, USA</i>	
Compilation of References	448
About the Contributors	492
Index	501