

Contents

Part I Tools of the Trade

1	Bayesian Methods for the Analysis of Human Behaviour	3
	Gwenn Englebienne	
2	Introduction to Sequence Analysis for Human Behavior	
	Understanding	21
	Hugues Salamin and Alessandro Vinciarelli	
3	Detecting and Tracking Action Content	41
	Alper Yilmaz	
4	Computational Visual Attention	69
	Simone Frintrop	

Part II Analysis of Activities

5	Methods and Technologies for Gait Analysis	105
	Elif Surer and Alper Kose	
6	Hand Gesture Analysis	125
	Cem Keskin, Oya Aran, and Lale Akarun	
7	Semantics of Human Behavior in Image Sequences	151
	Nataliya Shapovalova, Carles Fernández, F. Xavier Roca, and Jordi González	

Part III Social and Affective Behaviors

8	Social Signals: A Psychological Perspective	185
	Isabella Poggi and Francesca D’Errico	
9	Voice and Speech Analysis in Search of States and Traits	227
	Björn Schuller	

10 Continuous Analysis of Affect from Voice and Face 255
Hatice Gunes, Mihalis A. Nicolaou, and Maja Pantic

11 Analysis of Group Conversations: Modeling Social Verticality 293
Oya Aran and Daniel Gatica-Perez

Part IV Selected Applications

12 Activity Monitoring Systems in Health Care 325
Ben Kröse, Tim van Oosterhout, and Tim van Kasteren

13 Behavioral, Cognitive and Virtual Biometrics 347
Roman V. Yampolskiy

**14 Human Behavior Analysis in Ambient Gaming and Playful
Interaction 387**
Ben A.M. Schouten, Rob Tieben, Antoine van de Ven, and David W.
Schouten

Index 405



<http://www.springer.com/978-0-85729-993-2>

Computer Analysis of Human Behavior

Salah, A.A.; Gevers, T. (Eds.)

2011, XVI, 412 p., Hardcover

ISBN: 978-0-85729-993-2