Table of Contents

Modelling Social Signals

Generative Modelling of Dyadic Conversations: Characterization of Pragmatic Skills During Development Age	1
Social Coordination Assessment: Distinguishing between Shape and Timing	9
Emilie Delaherche, Sofiane Boucenna, Koby Karp, Stéphane Michelet, Catherine Achard, and Mohamed Chetouani	
Social Signals in Facial Expressions	
A Novel LDA and HMM-Based Technique for Emotion Recognition from Facial Expressions	19
Generation of Facial Expression for Communication Using Elfoid with Projector	27
Eye Localization from Infrared Thermal Images	35
Analysis of Speech and Physiological Speech	
The Effect of Fuzzy Training Targets on Voice Quality Classification Stefan Scherer, John Kane, Christer Gobl, and Friedhelm Schwenker	43
Physiological Effects of Delayed System Response Time on Skin	
Conductance David Hrabal, Christin Kohrs, André Brechmann, Jun-Wen Tan, Stefanie Rukavina, and Harald C. Traue	52
A Non-invasive Multi-sensor Capturing System for Human Physiological and Behavioral Responses Analysis	63
Senya Polikovsky, Maria Alejandra Quiros-Ramirez, Takehisa Onisawa, Yoshinari Kameda, and Yuichi Ohta	

Motion Analysis and Activity Recognition 3D Motion Estimation of Human Body from Video with Dynamic Camera Work 71 Matsumoto Ayumi, Wu Xiaojun, Kawamura Harumi, and Kojima Akira Motion History of Skeletal Volumes and Temporal Change in Bounding Volume Fusion for Human Action Recognition..... 79 Abubakrelsedik Karali and Mohammed ElHelw Multi-view Multi-modal Gait Based Human Identity Recognition from Surveillance Videos..... 88 Emdad Hossain, Girija Chetty, and Roland Goecke Multimodal Fusion Using the Transferable Belief Model for Multimodal Input Fusion in Companion Systems 100 Felix Schüssel, Frank Honold, and Michael Weber

116

131

Gerald Krell, Michael Glodek, Axel Panning, Ingo Siegert, Bernd Michaelis, Andreas Wendemuth, and Friedhelm Schwenker