

2017 Seventh International Conference on Affective Computing and Intelligent Interaction Workshops and Demos (ACIIW 2017)

**San Antonio, Texas, USA
23 – 26 October 2017**



**IEEE Catalog Number: CFP17K69-POD
ISBN: 978-1-5386-0681-0**

**Copyright © 2017 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP17K69-POD
ISBN (Print-On-Demand):	978-1-5386-0681-0
ISBN (Online):	978-1-5386-0680-3

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

DEEP NEURAL NETWORKS FOR ANGER DETECTION FROM REAL LIFE SPEECH DATA	1
<i>Jun Deng ; Florian Eyben ; Björn Schuller ; Felix Burkhardt</i>	
CAN A MACHINE PASS A SITUATIONAL JUDGMENT TEST MEASURING PERSONALITY PERCEPTION?	7
<i>Lei Chen ; Franklin Zaromb ; Zhitong Yang ; Chee Wee Leong ; Michelle Martin-Raugh</i>	
A MULTI-GRANULARITY DATA AUGMENTATION BASED FUSION NEURAL NETWORK MODEL FOR SHORT TEXT SENTIMENT ANALYSIS	12
<i>Xiao Sun ; Jiajin He ; Changqin Quan</i>	
BEHAVIOR PREDICTION IN-THE-WILD	18
<i>Christos Georgakis ; Yannis Panagakis ; Maja Pantic</i>	
SENTIMENT ANALYSIS USING IMAGE-BASED DEEP SPECTRUM FEATURES	26
<i>Shahin Amiriparian ; Nicholas Cummins ; Sandra Ottl ; Maurice Gerczuk ; Björn Schuller</i>	
FEATURE SELECTION IN MULTIMODAL CONTINUOUS EMOTION PREDICTION	30
<i>Shahin Amiriparian ; Michael Freitag ; Nicholas Cummins ; Björn Schuller</i>	
EEG ANALYSIS OF FACIAL AFFECT RECOGNITION PROCESS OF INDIVIDUALS WITH ASD PERFORMANCE PREDICTION LEVERAGING SOCIAL CONTEXT	38
<i>Jing Fan ; Esube Bekele ; Zachary Warren ; Nilanjan Sarkar</i>	
MULTIMODAL STABILITY-SENSITIVE EMOTION RECOGNITION BASED ON BRAINWAVE AND PHYSIOLOGICAL SIGNALS	44
<i>Nattapong Thammasan ; Juan Lorenzo Hagad ; Ken-ichi Fukui ; Masayuki Numao</i>	
RECOGNITION OF EMOTIONAL SPEECH WITH CONVOLUTIONAL NEURAL NETWORKS BY MEANS OF SPECTRAL ESTIMATES	50
<i>Norman Weißkirchen ; Ronald Bock ; Andreas Wendemuth</i>	
MULTIMODAL CROSS-CONTEXT RECOGNITION OF NEGATIVE INTERACTIONS	56
<i>Iulia Lefter ; Leon J. M. Rothkrantz</i>	
EMOLITE — A DATABASE FOR EMOTION DETECTION DURING LITERARY TEXT READING	62
<i>Rebekah Wegener ; Christian Kohlschein ; Sabina Jeschke ; Stella Neumann</i>	
ONLINE PEER-TO-PEER DISCUSSIONS: A PLATFORM FOR AUTOMATIC ASSESSMENT OF COMMUNICATION SKILL	68
<i>Sowmya Rasipuram ; Rahul Das ; S. B. Pooja Rao ; Dinesh Babu Jayagopi</i>	
VOICEPLAY — AN AFFECTIVE SPORTS GAME OPERATED BY SPEECH EMOTION RECOGNITION BASED ON THE COMPONENT PROCESS MODEL	74
<i>Gerhard Hagerer ; Florian Eyben ; Dagmar Schuller ; Klaus R. Scherer ; Björn Schuller</i>	
EXPLORING UNIVERSAL EXPRESSION OF EMOTION WITH VIBROTACTILE PATTERNS COMPOSED USING DYNAMIC FEATURES	77
<i>Valtteri Wikström ; Tommi Makkonen ; Katri Saarikivi</i>	
EMOTXT: A TOOLKIT FOR EMOTION RECOGNITION FROM TEXT	79
<i>Fabio Calefato ; Filippo Lanubile ; Nicole Novielli</i>	
SELF-EXPLANATIONS OF A COGNITIVE AGENT BY CITING GOALS AND EMOTIONS	81
<i>Frank Kaptein ; Joost Broekens ; Koen Hindriks ; Mark Neerincx</i>	
THERMSENSE: SMARTPHONE-BASED BREATHING SENSING PLATFORM USING NONCONTACT LOW-COST THERMAL CAMERA	83
<i>Youngjun Cho ; Nadia Bianchi-Berthouze ; Simon J. Julier ; Nicolai Marquardt</i>	
DEEP BREATHS: AN INTERNALLY- AND EXTERNALLY-PACED DEEP BREATHING GUIDE	85
<i>Adam Hair ; Ricardo Gutierrez-Osuna</i>	
THE ROLE OF EMOTION IN SELF-EXPLANATIONS BY COGNITIVE AGENTS	88
<i>Frank Kaptein ; Joost Broekens ; Koen Hindriks ; Mark Neerincx</i>	
INTERFACING BIOMUSIC & AUTISM: INTEGRATING ETHICAL CONSIDERATIONS INTO AFFECTIVE TECHNOLOGY DESIGN	94
<i>Florian Grond ; Melissa Park ; Tamar Tembeck ; Stefanie Blain-Moraes</i>	
A SPATIALLY EXPLICIT CLASSIFICATION MODEL FOR AFFECTIVE COMPUTING IN BUILT ENVIRONMENTS	100
<i>Heath Yates ; Brent Chamberlain ; William H. Hsu</i>	
NEURAL DOMAIN ADAPTATION OF SENTIMENT LEXICONS	105
<i>Oscar Araque ; Marco Guerini ; Carlo Strapparava ; Carlos A. Iglesias</i>	

MULTIMODAL MULTIMODEL EMOTION ANALYSIS AS LINKED DATA	111
<i>J. Fernando Sánchez-Rada ; Carlos A. Iglesias ; Hesam Sagha ; Björn Schuller ; Ian Wood ; Paul Buitelaar</i>	
ACOUSTIC ANALYSIS OF INFANT CRY SIGNAL TOWARDS AUTOMATIC DETECTION OF THE CAUSE OF CRYING	117
<i>Shivam Sharma ; Pruthvi Raj Myakala ; Rajasree Nalumachu ; Suryakanth V. Gangashetty ; V. K. Mittal</i>	
AFFECTIVE EVALUATION FOR MATERIAL PERCEPTION OF BEAD-COATED RESIN SURFACES USING VISUAL AND TACTILE SENSATIONS UNDER VIRTUAL AND REAL ENVIRONMENTS	123
<i>Michiko Ohkura ; Wataru Morishita ; Ryuji Miyazaki ; Masato Takahashi ; Hiroko Sakurai ; Kiyotaka Yarimizu ; Akira Nakahara</i>	
AFFECTIVE MULTI-AGENT SYSTEM FOR SIMULATING MECHANISMS OF SOCIAL EFFECTS OF EMOTIONS	129
<i>Mara Pudane</i>	
EFFECT OF DIFFERENT MUSIC GENRE: ATTENTION VS. MEDITATION	135
<i>Esther Ramdinmawii ; Vinay Kumar Mittal</i>	
AN INTELLIGENT SYSTEM FOR INFANT CRY DETECTION AND INFORMATION IN REAL TIME	141
<i>Pruthvi Raj Myakala ; Rajasree Nalumachu ; Shivam Sharma ; V. K. Mittal</i>	
AGREE TO DISAGREE: IMPROVING DISAGREEMENT DETECTION WITH DUAL GRUS	147
<i>Sushant Hiray ; Venkatesh Duppada</i>	
ETHICAL IMPLICATIONS OF ANALYZING OPINIONS, EMOTIONS AND INTERACTIONS IN SOCIAL MEDIA	153
<i>Viviana Patti ; Rossana Damiano ; Cristina Bosco</i>	
AUTOMATIC RECOGNITION OF PAIN, ANXIETY, ENGAGEMENT AND TIREDNESS FOR VIRTUAL REHABILITATION FROM STROKE: A MARGINALIZATION APPROACH	159
<i>Jesús Joel Rivas ; Lorena Palafox ; Jorge Hernández-Franco ; María del Carmen Lara ; Nadia Bianchi-Berthouze ; Felipe Orihuela-Espina ; Lúis Enrique Súcar</i>	
ANALYSIS OF PHONETIC MARKEDNESS AND GESTURAL EFFORT MEASURES FOR ACOUSTIC SPEECH-BASED DEPRESSION CLASSIFICATION	165
<i>Brian Stasak ; Julien Epps ; Aaron Lawson</i>	
DIFFERENTIAL PERFORMANCE OF AUTOMATIC SPEECH-BASED DEPRESSION CLASSIFICATION ACROSS SMARTPHONES	171
<i>Brian Stasak ; Julien Epps</i>	
ANALYSIS OF FACIAL EXPRESSIVENESS DURING EXPERIMENTALLY INDUCED HEAT PAIN	176
<i>Philipp Werner ; Ayoub Al-Hamadi ; Steffen Walter</i>	
MULTI-TASK NEURAL NETWORKS FOR PERSONALIZED PAIN RECOGNITION FROM PHYSIOLOGICAL SIGNALS	181
<i>Daniel Lopez-Martinez ; Rosalind Picard</i>	
DETECTION OF UNIVERSAL CROSS-CULTURAL DEPRESSION INDICATORS FROM THE PHYSIOLOGICAL SIGNALS OF OBSERVERS	185
<i>J. F. Plested ; T. D. Gedeon ; X. Y. Zhu ; A. Dhall ; Ropar R. Geocke</i>	
ROBOT MODELS OF MENTAL DISORDERS	193
<i>Matthew Lewis ; Lola Cañamero</i>	
Author Index	