

2021 9th International Conference on Affective Computing and Intelligent Interaction Workshops and Demos (ACIIW 2021)

Nara, Japan

28 September - 1 October 2021



IEEE Catalog Number: CFP21K69-POD
ISBN: 978-1-6654-0022-0

**Copyright © 2021 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:	CFP21K69-POD
ISBN (Print-On-Demand):	978-1-6654-0022-0
ISBN (Online):	978-1-6654-0021-3

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

A MULTIMODAL ENGAGEMENT-AWARE RECOMMENDER SYSTEM FOR PEOPLE WITH DEMENTIA	1
<i>Lars Steinert</i>	
USING MULTIMODAL TRANSFORMERS IN AFFECTIVE COMPUTING	6
<i>Juan Vazquez-Rodriguez</i>	
EMOTIONS IN SOCIO-CULTURAL INTERACTIVE AI AGENTS	11
<i>Aarti Malhotra, Jesse Hoey</i>	
MODELING THE INDUCTION OF PSYCHOSOCIAL STRESS IN VIRTUAL REALITY SIMULATIONS	17
<i>Celia Kessassi</i>	
EMOTION RECOGNITION IN EMERGENCY CALL CENTERS: THE CHALLENGE OF REAL-LIFE EMOTIONS	22
<i>Theo Deschamps-Berger</i>	
A THERAPEUTIC DIALOGUE AGENT FOR POLISH LANGUAGE	27
<i>Artur Zygodlo</i>	
IN-CORPO-REAL ROBOT-DREAMS: EMPATHY, SKIN, AND BOUNDARIES	32
<i>Dominika Lisy</i>	
DETECTION OF NUDGES AND MEASURING OF ALIGNMENT IN SPOKEN INTERACTIONS	37
<i>Natalia Kalashnikova</i>	
ROBOT MIRRORING: IMPROVING WELL-BEING BY FOSTERING EMPATHY WITH AN ARTIFICIAL AGENT REPRESENTING THE SELF	42
<i>David Antonio Gomez Jauregui, Felix Dollack, Monica Perusquia-Hernandez</i>	
EMOPAINT: EXPLORING EMOTION AND ART IN A VR-BASED CREATIVITY TOOL.....	49
<i>Jungah Son</i>	
AN AFFECT AS INTERACTION APPROACH FOR STRESS MANAGEMENT AMONG PARAMEDICS	54
<i>Akiri Surely</i>	
FANTASTIC IDEAS AND WHERE TO FIND THEM: ELEVATING CREATIVITY IN SELF-ORGANIZING SOCIAL NETWORKS.....	59
<i>Raiyan Abdul Baten</i>	
REAL-TIME UBIQUITOUS PAIN RECOGNITION	64
<i>Iyonna Tynes, Shaun Canavan</i>	
KEEP IT SIMPLE: HANDCRAFTING FEATURE AND TUNING RANDOM FORESTS AND XGBOOST TO FACE THE AFFECTIVE MOVEMENT RECOGNITION CHALLENGE 2021	69
<i>Vincenzo D'Amato, Luca Oneto, Antonio Camurri, Davide Anguita</i>	
ON THE POTENTIAL OF MODULAR VOICE CONVERSION FOR VIRTUAL AGENTS	76
<i>Silvan Mertes, Thomas Kiderle, Ruben Schlagowski, Florian Lingenfelser, Elisabeth Andre</i>	

TASK-BASED CLASSIFICATION OF REFLECTIVE THINKING USING MIXTURE OF CLASSIFIERS	83
<i>Saandeep Aathreya, Liza Jivnani, Shivam Srivastava, Saurabh Hinduja, Shaun Canavan</i>	
COMPARISON OF DEEP LEARNING APPROACHES FOR PROTECTIVE BEHAVIOUR DETECTION UNDER CLASS IMBALANCE FROM MOCAP AND EMG DATA	91
<i>Karim Radouane, Andon Tchechmedjiev, Binbin Xu, Sebastien Harispe</i>	
THE AFFECTMOVE CHALLENGE: SOME MACHINE LEARNING APPROACHES	99
<i>Gerard Dray, Pierre-antoine Jean, Yann Maheu, Jacky Montmain, Nicolas Sutton-charani</i>	
MULTIMODAL CONVOLUTIONAL NEURAL NETWORK MODEL FOR PROTECTIVE BEHAVIOR DETECTION BASED ON BODY MOVEMENT DATA	104
<i>Kim Ngan Phan, Soo-hyung Kim, Hyung-jeong Yang, Guee-sang Lee</i>	
SUGO-MIMI: A WAGGLE EAR-TYPE DEVICE LINKED TO EYEBROWS	110
<i>Shoko Kimura, Ayaka Fujii, Seiichi Harata, Takuto Sakuma, Shohei Kato</i>	
RELATIONSHIP BETWEEN MOOD IMPROVEMENT AND QUESTIONING TO EVALUATE AUTOMATIC THOUGHTS IN COGNITIVE RESTRUCTURING WITH A VIRTUAL AGENT	113
<i>Kazuhiro Shidara, Hiroki Tanaka, Hiroyoshi Adachi, Daisuke Kanayama, Yukako Sakagami, Takashi Kudo, Satoshi Nakamura</i>	
UNDERSTANDING SHAME SIGNALS: FUNCTIONS OF SMILE AND LAUGHTER IN THE CONTEXT OF SHAME	118
<i>Mirella Hladky, Tanja Schneeberger, Patrick Gebhard</i>	
SIMULATING FEAR AS ANTICIPATION OF TEMPORAL DIFFERENCES: AN EXPERIMENTAL INVESTIGATION	125
<i>Laduona Dai, Joost Broekens</i>	
ECONOMIC AND SOCIAL CONSEQUENCES OF ANGER AND GENDER IN COMPUTER-MEDIATED NEGOTIATIONS: IS THERE A BACKLASH AGAINST ANGRY FEMALES?	133
<i>Janet Wessler</i>	
IMPLEMENTING PARALLEL AND INDEPENDENT MOVEMENTS FOR A SOCIAL ROBOT'S AFFECTIVE EXPRESSIONS	139
<i>Hannes Ritschel, Thomas Kiderle, Elisabeth Andre</i>	
SOCIALLY-AWARE PERSONALITY ADAPTATION	143
<i>Thomas Kiderle, Hannes Ritschel, Kathrin Janowski, Silvan Mertes, Florian Lingenfelder, Elisabeth Andre</i>	
THE AFFECTMOVE 2021 CHALLENGE - AFFECT RECOGNITION FROM NATURALISTIC MOVEMENT DATA	151
<i>Temitayo Olugbade, Roberto Sagoleo, Simone Ghisio, Nicolas Gold, Amanda C De C Williams, Beatrice De Gelder, Antonio Camurri, Gualtiero Volpe, Nadia Bianchi-Berthouze</i>	
INDIVIDUAL DIFFERENCES AND THE FUNCTION OF EMOTIONS IN SOCIO-EMOTIONAL AND COGNITIVE CONFLICT: IF AN AGENT SHAMES YOU, WILL YOU STILL BE BORED?	156
<i>Lara Chehayeb, Dimitra Tsovaltzi, Rhythm Arora, Patrick Gebhard</i>	
JOB INTERVIEW TRAINING SYSTEM USING MULTIMODAL BEHAVIOR ANALYSIS	164
<i>Nao Takeuchi, Tomoko Koda</i>	

VISUALIZATION OF SOCIAL EMOTIONAL APPRAISAL PROCESS OF AN AGENT	167
<i>Motoaki Sato, Kazunori Terada, Jonathan Gratch</i>	
A SYSTEM FOR COLLECTING EMOTIONALLY ANNOTATED PHYSIOLOGICAL SIGNALS IN DAILY LIFE USING WEARABLES	169
<i>Stanislaw Saganowski, Maciej Behnke, Joanna Komoszynska, Dominika Kunc, Bartosz Perz, Przemyslaw Kazienko</i>	
EVENT REPRESENTATION AND SEMANTICS PROCESSING SYSTEM FOR F-2 COMPANION ROBOT	172
<i>Artemiy Kotov, Nikita Arinkin, Alexander Filatov, Liudmila Zaidelman, Anna Zinina, Kirill Kivva</i>	
UNBIASED MIMIC ACTIVITY EVALUATION: F2F EMOTION STUDIO SOFTWARE	175
<i>Mikhail Baev, Alexey Gusev, Alexander Kremlev</i>	
EMOTIONAL PARAPHRASING USING PRE-TRAINED LANGUAGE MODELS	177
<i>Jacky Casas, Samuel Torche, Karl Daher, Elena Mugellini, Omar Abou Khaled</i>	
DISCRETE VERSUS ORDINAL TIME-CONTINUOUS BELIEVABILITY ASSESSMENT	184
<i>Cristiana Pacheco, David Melhart, Antonios Liapis, Georgios N. Yannakakis, Diego Perez- Liebana</i>	
ATTENTIVE CROSS-MODAL CONNECTIONS FOR DEEP MULTIMODAL WEARABLE- BASED EMOTION RECOGNITION	191
<i>Anubhav Bhatti, Behnam Behinaein, Dirk Rodenburg, Paul Hungler, Ali Etemad</i>	
ELICITING CONFUSION IN ONLINE CONVERSATIONAL TASKS	196
<i>Nikhil Kaushik, Reynold Bailey, Alexander Ororbia, Cecilia O. Alm</i>	
HIREPRETER: A FRAMEWORK FOR PROVIDING FINE-GRAINED INTERPRETATION FOR AUTOMATED JOB INTERVIEW ANALYSIS	201
<i>Wasifur Rahman, Sazan Mahbub, Asif Salekin, Md Kamrul Hasan, Ehsan Hoque</i>	
QUANTIFYING THE INTENSITY OF TOXICITY FOR DISCUSSIONS AND SPEAKERS.....	206
<i>Samiha Samrose, Ehsan Hoque</i>	
EMBRACING AND EXPLOITING ANNOTATOR EMOTIONAL SUBJECTIVITY: AN AFFECTIVE RATER ENSEMBLE MODEL	211
<i>Lukas Stappen, Lea Schumann, Anton Batliner, Bjorn W. Schuller</i>	
AFFRANKNET+: RANKING AFFECT USING PRIVILEGED INFORMATION	219
<i>Konstantinos Makantasis</i>	
GO-BLEND BEHAVIOR AND AFFECT.....	227
<i>Matthew Barthes, Antonios Liapis, Georgios N. Yannakakis</i>	
AFFECTGAN: AFFECT-BASED GENERATIVE ART DRIVEN BY SEMANTICS	235
<i>Theodoros Galanos, Antonios Liapis, Georgios N. Yannakakis</i>	
DREAM NET: A PRIVACY PRESERVING CONTINUAL LEARNING MODEL FOR FACE EMOTION RECOGNITION	242
<i>Marion Mainsant, Miguel Solinas, Marina Reyboz, Christelle Godin, Martial Mermillod</i>	
TEMPORAL CONDITIONAL WASSERSTEIN GANS FOR AUDIO-VISUAL AFFECT- RELATED TIES	250
<i>Christos Athanasiadis, Enrique Hortal, Stelios Asteriadis</i>	

TEMPORAL BASED EMOTION RECOGNITION INSPIRED BY ACTIVITY RECOGNITION MODELS	258
<i>Balaganesh Mohan, Mirela Popa</i>	
MODELING EMOTIONS AS LATENT REPRESENTATIONS OF APPRAISALS	266
<i>Marios Fanourakis, Rayan Elalamy, Guillaume Chanel</i>	
EMOTION-AWARE TRANSFORMER ENCODER FOR EMPATHETIC DIALOGUE GENERATION	273
<i>Raman Goel, Seba Susan, Sachin Vashisht, Armaan Dhanda</i>	
TOWARDS UNDERSTANDING CONFUSION AND AFFECTIVE STATES UNDER COMMUNICATION FAILURES IN VOICE-BASED HUMAN-MACHINE INTERACTION	279
<i>Sujeong Kim, Abhinav Garlapati, Jonah Lubin, Amir Tamrakar, Ajay Divakaran</i>	
COMPARISON OF HEAD AND BODY MOVEMENT PATTERNS IN NATURALISTIC HUMAN-MACHINE INTERACTION	284
<i>Jannes Bützer, Ronald Böck</i>	
A SIMPLE BASELINE FOR EVALUATING EXPRESSION TRANSFER AND ANONYMISATION IN VIDEO TRANSFER	291
<i>Gabriel Haddon–hill, Keerthy Kusumam, Michel Valstar</i>	

Author Index