

2016 International Conference on Orange Technologies (ICOT 2016)

**Melbourne, Australia
18 – 20 December 2016**



**IEEE Catalog Number: CFP16ORA-POD
ISBN: 978-1-5386-4832-2**

**Copyright © 2016 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:	CFP16ORA-POD
ISBN (Print-On-Demand):	978-1-5386-4832-2
ISBN (Online):	978-1-5386-4831-5

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

SPEECH EMOTION RECOGNITION USING AUTOENCODER BOTTLENECK FEATURES AND LSTM	1
<i>Kun-Yi Huang ; Chung-Hsien Wu ; Tsung-Hsien Yang ; Ming-Hsiang Su ; Jia-Hui Chou</i>	
DETECTION OF MOOD DISORDER USING MODULATION SPECTRUM OF FACIAL ACTION UNIT PROFILES	5
<i>Tsung-Hsien Yang ; Chung-Hsien Wu ; Ming-Hsiang Su ; Chia-Cheng Chang</i>	
ANSWER SEGMENTATION FOR QUESTION ANSWERING USING LATENT DIRICHLET ALLOCATION AND DELTA BAYESIAN INFORMATION CRITERION	9
<i>Ming-Hsiang Su ; Tsung-Hsien Yang ; Wu-Hsuan Lin ; Chung-Hsien Wu</i>	
A HAPPINESS CUPS SYSTEM FOR HOLDING-CUP MOTION RECOGNITION AND WARMING-CARE DELIVERY	13
<i>Ta-Wen Kuan ; Shih-Pang Tseng ; Jhing-Fa Wang ; Pin-Jie Chen</i>	
AN APPLICATION OF INTERNET OF THINGS ON SUSTAINABLE AQUACULTURE SYSTEM	17
<i>Shih-Pang Tseng ; Ying-Ren Li ; Ming-Chang Wang</i>	
ENSURING DATA INTEGRITY IN ELECTRONIC HEALTH RECORDS: A QUALITY HEALTH CARE IMPLICATION	20
<i>P. Vimalachandran ; H. Wang ; Y. Zhang ; B. Heyward ; F. Whittaker</i>	
A CENTER LOCATION ALGORITHM USED IN CELLS MICROSCOPIC IMAGE	28
<i>Pu Hui ; Jinqiu Sun ; Danna Xue ; Chen Ding ; Yanming Zhang</i>	
COMPARISONS ON NUMERICALLY-CALCULATED HRTFS OF TYPICAL DUMMY HEADS	32
<i>Suyun Gao ; Zhong-hua Fu ; Pengyun Guang</i>	
IMPROVED TF-IDF WEIGHT METHOD BASED ON SENTENCE SIMILARITY FOR SPOKEN DIALOGUE SYSTEM	36
<i>Bo-Hao Su ; Ta-Wen Kuan ; Shih-Pang Tseng ; Jhing-Fa Wang ; Po-Huai Su</i>	
A HUMEM SYSTEM FOR ONLINE MULTIMEDIA FEEDBACK	40
<i>Bo-Hao Su ; Ming-Hsuan Lu ; Kuan Ta-Wen ; Jhing-Fa Wang</i>	
SPECTRAL-SPATIAL CLASSIFICATION OF HYPERSPECTRAL IMAGERY BASED ON DEEP CONVOLUTIONAL NETWORK	44
<i>Haokui Zhang ; Ying Li</i>	
AFFECTIVE IMAGE CLASSIFICATION BY JOINTLY USING LOW-LEVEL VISUAL FEATURES AND INTERPRETABLE AESTHETIC FEATURES	48
<i>Na Li ; Yong Xia</i>	
SUNNFERING UNDERSTANDING SYSTEM BASED ON FACIAL EXPRESSION AND HUMAN ACTION	52
<i>Yang-Yen Ou ; Ta-Wen Kuan ; An-Chao Tsai ; Jhing-Fa Wang ; Jheng-Ping Chiou</i>	
HAPPINESS UNDERSTANDING SYSTEM BASED ON HUMAN ACTION RECOGNITION	56
<i>Yang-Yen Ou ; An-Chao Tsai ; Ta-Wen Kuan ; Jhing-Fa Wang ; Jing-Hua Tian</i>	
DUAL-CHANNEL CONVOLUTIONAL NEURAL NETWORK FOR CHANGE DETECTION OF MULTITEMPORAL SAR IMAGES	60
<i>Tao Liu ; Ying Li ; Longhao Xu</i>	
UNSUPERVISED CHANGE DETECTION FOR REMOTE SENSING IMAGES BASED ON OBJECT-BASED MRF AND STACKED AUTOENCODERS	64
<i>Ying Li ; Longhao Xu ; Tao Liu</i>	
IMPLEMENTATION OF ASSR SYSTEM BASED ON HMM AND SYLLABLE MODELS ON FPGA	68
<i>Chen Che Wen ; Wei-Xiang Liao ; Ta-Wen Kuan ; Jhing-Fa Wang</i>	
JOINTLY USING COMPUTATIONALLY SELECTED AND CLINICALLY SUGGESTED CORTICAL VOLUMES FOR AUTOMATED IDENTIFICATION OF MILD COGNITIVE IMPAIRMENT	72
<i>Chuanchuan Zheng ; Na Li ; Yong Xia</i>	
A SURVEY OF DEEP FACE RECOGNITION IN THE WILD	76
<i>Bima Prihasto ; Shabrina Choirunnisa ; Muhammad Ishak Nurdiansyah ; Seksan Mathulaprangsan ; Vivian Ching-Mei Chu ; Shi-Huang Chen ; Jia-Ching Wang</i>	
NMF/NTF-BASED METHODS APPLIED FOR USER-GUIDED AUDIO SOURCE SEPARATION: AN OVERVIEW	80
<i>Manh-Quan Bui ; Viet-Hang Duong ; Shih-Pang Tseng ; Zhao-Ze Hong ; Bo-Chang Chen ; Zhi-Wei Zhong ; Jia-Ching Wang</i>	

VEHICLE FUEL PUMP SERVICE LIFE EVALUATION USING ON-BOARD DIAGNOSTIC (OBD) DATA	84
<i>Shi-Huang Chen ; Wen-Kai Liu ; Jui-Yang Tsai ; I-Chou Hung</i>	
HEALTH TRAINING APP DESIGN: A COMPREHENSIVE MODEL OF MINDFULNESS FEEDBACK SYSTEM.....	88
<i>Shun-Yuan Cheng ; Xiaobin Wu ; Shyhman Liou</i>	
SMARTLEARN: PREDICTING LEARNING PERFORMANCE AND DISCOVERING SMART LEARNING STRATEGIES IN FLIPPED CLASSROOM.....	92
<i>Yu Yang ; Hanqing Wu ; Jiannong Cao</i>	
HOW TO GROW SOCIAL INNOVATION FROM THE VIEW OF ORGANIZATIONAL SCALING AND DIFFUSION: CASES OF ECO-TOURISM COMMUNITIES IN TAIWAN.....	96
<i>Yi-Chun Tai ; Chia-Han Yang</i>	
Author Index	