

# **7th Latin American Conference on Networked and Electronic Media (LACNEM 2017)**

IET Seminar Digests 2017/0006

Valparaiso, Chile  
6 – 7 November 2017

ISBN: 978-1-5108-6181-7

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571



**Some format issues inherent in the e-media version may also appear in this print version.**

Copyright© (2017) by the Institution of Engineering and Technology  
All rights reserved.

Printed by Curran Associates, Inc. (2018)

For permission requests, please contact the Institution of Engineering and Technology  
at the address below.

Institution of Engineering and Technology  
P. O. Box 96  
Stevenage, Hertfordshire  
U.K. SG1 2SD

Phone: 01-441-438-767-328-328  
Fax: 01-441-438-767-328-375

[www.theiet.org](http://www.theiet.org)

**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  
Email: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

## TABLE OF CONTENTS

<b>ACCURATE FIRE DETECTION THROUGH FULLY CONVOLUTIONAL NETWORK.....</b>	1
<i>A. Gonzalez, M. D. Zuniga, C. Nikulin, G. Carvajal, D. G. Cardenas, M. A. Pedraza, C. A. Fernandez, R. I. Munoz, N. A. Castro, B. F. Rosales, J. M. Quinteros, F. J. Rauh, M. A. Akhlooui</i>	
<b>REAL-TIME GENDER RECOGNITION FROM FACE IMAGES USING DEEP CONVOLUTIONAL NEURAL NETWORK .....</b>	7
<i>C. I. Orozco, F. Iglesias, M. E. Buemi, J. J. Berlles</i>	
<b>AN OPEN ACCESS USER GENERATED VIDEO DATASET FROM 2016 EDINBURGH FESTIVAL .....</b>	12
<i>F. Toutounchi, E. Izquierdo</i>	
<b>COMPARATIVE ANALYSIS OF FILTERS IN CONFOCAL MICROSCOPY IMAGES.....</b>	16
<i>M. G. Forero, D. Rojas-Rodríguez, C. González-Santos, C. Restrepo-Taborda, R. Peña-Ambrosio</i>	
<b>CLASSIFICATION OF MALIGNANT AND BENIGN TISSUES IN MAMMOGRAPHY USING DENTAL SHAPE DESCRIPTORS AND SHAPE DISTRIBUTION .....</b>	22
<i>J. C. Souza, T. F. B. Silva, S. V. Rocha, A. C. Paiva, G. Braz, J. D. S. Almeida, A. C. Silva</i>	
<b>LINKED DATA SEARCH AND EXPLORATION INTERFACES .....</b>	28
<i>H. Vargas, C. Buil-Aranda</i>	
<b>SEMANTIC ANNOTATION AND RETRIEVAL OF SCIENTIFIC DOCUMENTS IN A BIG DATA ENVIRONMENT .....</b>	33
<i>N. A. Portilla Herrera, F. López Gomez, V. A. Bucheli, O. Solarte Pabón</i>	
<b>GENERALIZATION OF PROPAGATED IMAGE FILTERING .....</b>	39
<i>M. G. Forero, C. A. Restrepo-Taborda</i>	
<b>GLOBAL AND LOCAL FEATURES FOR BEAN IMAGE CLASSIFICATION .....</b>	45
<i>M. Garcia, M. Trujillo, D. Chaves</i>	
<b>IMPROVED SEGMENTATION OF MERISTEM CELLS BY AN AUTOMATED OPTIMISATION ALGORITHM .....</b>	51
<i>O. Rojas, M. G. Forero, J. M. Menéndez, A. Jones, W. Dewitte, J. A. H. Murray</i>	
<b>AUTOMATIC CONSUMPTION READING ON ELECTROMECHANICAL METERS USING HOG AND SVM .....</b>	57
<i>D. B. P. Quintanilha, R. W. S. Costa, J. O. B. Diniz, J. D. S. De Almeida, G. Braz, A. C. Silva, A. C. De Paiva, E. M. Monteiro, B. R. Froz, L. P. A. Piheiro, W. Melho</i>	
<b>ONTOLOGY-BASED ANALYSIS OF CCTV DATA .....</b>	62
<i>N. F. Kahar, E. Izquierdo</i>	
<b>VISUAL SUMMARIZATION OF ONLINE NEWS THROUGH TOPICS USING LATENT DIRICHLET ALLOCATION .....</b>	68
<i>E. Jorquera, H. Rosas</i>	
<b>A NEW STRATEGY FOR CLASSIFICATION BASED ON SEQUENTIAL ASSOCIATION RULES .....</b>	74
<i>J. Febrero-Hernandez, A. Gago-Alonso</i>	
<b>Author Index</b>	