

24th International DMS Conference on Visualization and Visual Languages (DMSVIVA 2018)

Redwood City, California, USA
29-30 June 2018

ISBN: 978-1-5108-9147-0

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© (2018) by KSI Research Inc.
All rights reserved.

Printed by Curran Associates, Inc. (2019)

For permission requests, please contact KSI Research Inc.
at the address below.

KSI Research Inc.
156 Park Square Lane
Pittsburgh, PA 15238
USA

Phone: 412-606-5022

office@ksiresearch.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
Web: www.proceedings.com

Table of Contents

Plenary Talk

Reasoning with Diagrams: Observation, Inference and Overspecificity (Plenary)	1
<i>Gem Stapleton</i>	

Session I Supporting People: Education and Perception

A Sentiment Analysis Approach for supporting Blended Learning Process	8
<i>Francesco Colace, Fabio Clarizia, Marco Lombardi and Francesco Pascale</i>	
Implications of learning environments on the Information Systems of educational institutions	15
<i>Andrea Molinari and Paolo Maresca</i>	
Where do People Look while Identifying Colors in Images	23
<i>Soraia M. Alarcão, Ruben Pavão and Manuel J. Fonseca</i>	

Session II Smart Cities and Systems

A multi-level approach for forecasting critical events in Smart Cities (S)	31
<i>Francesco Colace, Marco Lombardi, Francesco Pascale and Domenico Santaniello</i>	
Supporting Living Lab with Life Cycle and Tools for Smart City Environments (S)	36
<i>Paolo Nesi and Mehela Paolucci</i>	
Smart City Control Room Dashboards Exploiting Big Data Infrastructure (S)	44
<i>Paolo Nesi, Pierfrancesco Bellini, Mino Marazzini, Nicola Mitolo, Michela Paolucci and Daniele Cenni</i>	
RADS: a smart Road Anomalies Detection System using Vehicle-2-Vehicle network and cluster features (S)	51
<i>Walter Balzano and Fabio Vitale</i>	

Session III Data and Systems

Enriching IAPS and GAPED Image Datasets with Unrestrained Emotional Data	57
<i>Soraia M. Alarcão and Manuel J. Fonseca</i>	
A Mobile Dietary and Emotional Diary System for Eating Disorder Care on the Smart Phone	65
<i>Shikuo Chang, Jung Kim and Hanzhong Zheng</i>	
Event-Based Data Input, Modeling and Analysis for Meditation Tracking using TDR System	71
<i>Shikuo Chang, Cuiling Chen, Wei Guo and Nannan Wen</i>	
Generating Synthetic Memory References via Hierarchical Markov Models Effectively and Efficiently	83
<i>Alfredo Cuzzocrea</i>	

Session IV Graphs, Logic and Validation

Spider Diagrams with Absence	91
<i>Gem Stapleton, Lopamudra Choudhury and Mihir Chakraborty</i>	
An Edge-based Graph Grammar Formalism and its Support System	101
<i>Xiaoqin Zeng, Yufeng Liu, Zhan Shi, Yingfeng Wang, Yang Zou, Jun Kong and Kang Zhang</i>	
BugHint: A Visual Debugger Based on Graph Mining	109
<i>Jennifer Leopold, Nathan Eloie and Patrick Taylor</i>	
A Logic Range-free Algorithm for Localization in Wireless Sensor Networks	119
<i>Walter Balzano and Silvia Stranieri</i>	
On the Problem-Oriented Validation of Cyber-Physical Systems Using System-Level Test Sequences (S)	125
<i>Changlan Fu, Xiao Zhang, Zhi Li, Ziyang Zhao, Chao Wang and Yuekun Yu</i>	