

International Journal of Adaptive, Resilient and Autonomic Systems

April-June 2014, Vol. 5, No. 2

Table of Contents

SPECIAL ISSUE ON THE 9TH IEEE INTERNATIONAL CONFERENCE ON AUTONOMIC AND TRUSTED COMPUTING (ATC 2012)

GUEST EDITORIAL PREFACE

- iv *Katinka Wolter, Fachbereich Mathematik und Informatik, AG Technische Informatik, Berlin, Germany*
Philipp Reinecke, Fachbereich Mathematik und Informatik, AG Technische Informatik, Berlin, Germany
Vincenzo de Florio, Department of Mathematics and Computer Science, University of Antwerp, Antwerp, Belgium

RESEARCH ARTICLES

- 1 **A Virtual Machine Placement and Reconfiguration Framework for Cloud Computing Platforms**
Wei Chen, Institute of Software, The Chinese Academy of Sciences, Beijing, China
Xiaoqiang Qiao, Institute of Software, The Chinese Academy of Sciences, Beijing, China
Jun Wei, Institute of Software, The Chinese Academy of Sciences, Beijing, China
Hua Zhong, Institute of Software, The Chinese Academy of Sciences, Beijing, China
Tao Huang, Institute of Software, The Chinese Academy of Sciences, Beijing, China
- 23 **Towards Availability: A Dynamic Scaling Mechanism for Cloud Applications**
Wenting Wang, REINS Group, School of Software, Shanghai Jiao Tong University Shanghai, Shanghai, China
Haopeng Chen, REINS Group, School of Software, Shanghai Jiao Tong University Shanghai, Shanghai, China
Xi Chen, AESOP Group, Department of Computing, Imperial College London, London, UK
- 40 **Performance Degradation Detection of Virtual Machines Via Passive Measurement and Machine Learning**
Toshiaki Hayashi, Hokuriku Computer Service Co., Ltd., Toyama, Japan
Satoru Ohta, Toyama Prefectural University, Toyama, Japan
- 57 **Autonomic Workflow Activities: The AWARD Framework**
Luis Assuncao, ISEL, CITI/FCT-UNL, Lisboa, Portugal
Carlos Goncalves, ISEL, CITI/FCT-UNL, Lisboa, Portugal
Jose C. Cunha, CITI / Department de Informática FCT-UNL, Lisboa, Portugal
- 83 **Efficient and Fine-Grained VMM-Level Packet Filtering for Self-Protection**
Kenichi Kourai, Kyushu Institute of Technology, Fukuoka, Japan
Takeshi Azumi, Tokyo Institute of Technology, Tokyo, Japan
Shigeru Chiba, The University of Tokyo, Tokyo, Japan

Copyright

The *International Journal of Adaptive, Resilient and Autonomic Systems (IJARAS)* (ISSN 1947-9220; eISSN 1947-9239), Copyright © 2014 IGI Global. All rights, including translation into other languages reserved by the publisher. No part of this journal may be reproduced or used in any form or by any means without written permission from the publisher, except for noncommercial, educational use including classroom teaching purposes. Product or company names used in this journal are for identification purposes only. Inclusion of the names of the products or companies does not indicate a claim of ownership by IGI Global of the trademark or registered trademark. The views expressed in this journal are those of the authors but not necessarily of IGI Global.

The *International Journal of Adaptive, Resilient and Autonomic Systems* is indexed or listed in the following: ACM Digital Library; DBLP; Google Scholar; INSPEC; JournalTOCs; Library & Information Science Abstracts (LISA); MediaFinder; The Standard Periodical Directory; Ulrich's Periodicals Directory