

INTERNATIONAL JOURNAL OF GRID AND HIGH PERFORMANCE COMPUTING

July-September 2013, Vol. 5, No. 3

Table of Contents

SPECIAL ISSUE ON MOBILE AND WIRELESS COMPUTING TOWARDS SUSTAINABLE AND UBIQUITOUS CLOUDS SERVICES

RESEARCH ARTICLES

- 1 **Mobile and Wireless Computing towards Sustainable and Ubiquitous Clouds Services**
Ching-Hsien Hsu, Department of Computer Science and Information Engineering, Chung Hua University, Hsinchu, Taiwan
Emmanuel Udoh, College of Information and Computer Technology, Sullivan University, Louisville, KY, USA
- 6 **Toward an Access Infrastructure for Mobile Cloud: A Channel Assignment Scheme for Wireless Mesh Networks**
Yuan-Kao Dai, National University of Kaohsiung, Kaohsiung, Taiwan
Li-Hsing Yen, National University of Kaohsiung, Kaohsiung, Taiwan
Jia-Wei Su, National University of Kaohsiung, Kaohsiung, Taiwan
- 20 **A Novel Path Planning to Provide Real-Time Backup Paths for Vehicle Navigation Systems**
Shih-Lin Wu, Department of Computer Science and Information Engineering, Chang Gung University, Taoyuan, Taiwan
Jhe-yu Jhou, Department of Computer Science and Information Engineering, Chang Gung University, Taoyuan, Taiwan
Yi-Chun Lin, Department of Computer Science and Information Engineering, Chang Gung University, Taoyuan, Taiwan
- 34 **An Energy-Efficient Data Dissemination Scheme in Large-Scale Wireless Sensor Networks**
Shiow-Fen Hwang, Feng Chia University, Taichung, Taiwan
Han-Huei Lin, Feng Chia University, Taichung, Taiwan
Chyi-Ren Dow, Feng Chia University, Taichung, Taiwan
- 55 **Multiple Sequence Alignments with Regular Expression Constraints on a Cloud Service System**
Yu-Shiang Lin, National Tsing Hua University, Hsinchu, Taiwan
Chun-Yuan Lin, Chang Gung University, Tao-Yuan, Taiwan
Hsiao-Chieh Chi, National Tsing Hua University, Hsinchu, Taiwan
Yeh-Ching Chung, National Tsing Hua University, Hsinchu, Taiwan
- 65 **Calibration-Free Localizations and Applications on U-Care Cloud**
Shih-Lin Wu, Department of Computer Science and Information Engineering, Chang Gung University, Tao-Yuan, Taiwan
Yu-Liang Yeh, Department of Computer Science and Information Engineering, Chang Gung University, Tao-Yuan, Taiwan
Chia-Feng Lin, Department of Computer Science and Information Engineering, Chang Gung University, Tao-Yuan, Taiwan
- 75 **Applying Design of Experiments (DOE) to Performance Evaluation of Commercial Cloud Services**
Zheng Li, Australian National University, Canberra, ACT, Australia & NICTA, Canberra, ACT, Australia
Liam O'Brien, Geoscience Australia, Canberra, ACT, Australia
He Zhang, University of East London, London, UK
Rajiv Ranjan, CSIRO ICT Center, Canberra, ACT, Australia

Copyright

The **International Journal of Grid and High Performance Computing (IJGHPC)** (ISSN 1938-0259; eISSN 1938-0267), Copyright © 2013 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.

IJGHPC is currently listed or indexed in: ACM Digital Library; Bacon's Media Directory; Cabell's Directories; Compendex (Elsevier Engineering Index); DBLP; GetCited; Google Scholar; INSPEC; JournalTOCs; MediaFinder; SCOPUS; The Standard Periodical Directory; Ulrich's Periodicals Directory