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ABSTRACT

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Min-Hsien Weng, Bernhard Pfahringer, Mark Utting
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Houda Zouhaier, Lamjed Ben Said
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Nigel Stanger
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John Wondoh, Georg Grossmann, Markus Stumptner
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Khaled Albishre, Yuefeng Li, Yue Xu
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Microblog services such as Twitter have become a part of daily life for many users, with thousands of documents published each second. Microblog documents are often too short, overwhelming in their use of informal language and hard to understand due ... expand

Content-based emotion classification in online social networks for Chinese Microblogs
Xiujuan Xu, Xiaowei Zhao, Fei Xiong, Shimin Shan, Yu Liu
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Recent years, social networks are popular throughout the whole world. In China in particular, more people spend their time on social networks. Sina Weibo, as the most popular microblogs in China, records millions of microblogs from different population. ... expand

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Arshad Khan, Thanassis Tiropanis, David Martin
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Alan Woodley, Timothy Chappell, Shlomo Geva, Richi Nayak
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Remote sensing data is becoming readily available on the Web. However, remote sensing data is not as widely used as other web data. Here, we explore how a fusion of remote sensing data with web paradigms and data would benefit the remote sensing community. ... expand

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Jie Yang, Jun Ma, Sarah K. Howard, Matthew Ciao, Rangan Srikhanta
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Kyaw Kyaw Htat, Patricia A H Williams, Vincent McCauley
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Arif Khan, Shahadat Uddin, Uma Srinivasan
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Hospitals routinely collect admitted patients' data for administrative purposes and for reporting to the government and health insurers. These heterogeneous and mostly untapped data contain rich semantic information about patients' health conditions ... expand

Vulnerabilities associated with wi-fi protected setup in a medical environment

Daniel Costantin, Krishnun Sansurooah, Patricia A H Williams
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Developed in the mid-2000s by the Wi-Fi Alliance, the Wi-Fi Protected (WPS) protocol assists configuration of mobile and wireless networks. Its development grew from the needs of less technology knowledgeable end-users to be able to setup wireless networks, ... expand

Characterizing IT-based consumer health artefacts
Nathan Poultney, Anthony Maeder, Niranjan Bidargaddi
Article No.: 59
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Data-driven patient segmentation using K-means clustering: the case of hip fracture care in Ireland
Mahmoud Elbattah, Owen Molloy
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doi>10.1145/3014812.3014874
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Machine learning continues to forge the future of decision making in a broad diversity of domains including healthcare. Data-driven methods are increasingly geared towards leveraging evidence-based insights from large volumes of patient data. In this ... expand

uating sensor placement and modality for activity recognition in active games
lie Jablonsky, Sophie McKenzie, Shaun Bangay, Tim Wilkin
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Active games augment physical activity with the immersive elements of computer games running on mobile devices to encourage healthy behaviours in players. Such games rely on automated human activity recognition systems to obtain meaningful input for ... expand

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Jacqueline D. Bailey, Karen L. Blackmore
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doi>10.1145/3014812.3014876
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Avatars have been a traditional mainstay of game-based interactive entertainment, where they aim to enhance story-based immersion and player engagement. However, there has also been an increase in the use of avatars for other purposes, such as in serious ... expand

An analysis of game environments as measured by fractal complexity
Daniel Della-Bosca, Dale Patterson, Scott Roberts
Article No.: 63
doi>10.1145/3014812.3014877
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The aesthetics of the games environment can sometimes be of secondary consideration to gameplay. This research is concerned with the reception of the 'pictorial space' by the viewer and how the viewer's experience may be modified either positively or ... expand

Virtual weather systems: measuring impact within videogame environments
Scott Roberts, Dale Patterson
Article No.: 64
doi>10.1145/3014812.3014878
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This paper describes a study of the impact of rich weather systems within interactive virtual environments. Increasing realism within videogames creates the necessity for more precise simulation of "real-life" environments. To experimentally test the ... expand

of a biologically adapted reaction-diffusion model to generate hair properties for synthetic creatures
Mai Bong, Shaun Bangay
Article No.: 65
doi>10.1145/3014812.3014879
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One of the major challenges in computer graphics is to reproduce natural hair on virtual animals. Existing methods focus on reproducing the appearance of natural hair, however, this paper focuses on reproducing the natural development process. Previously, ... expand

Modeling social interestingness in conversational stories
Morteza Behrooz, Arnav Jhala
Article No.: 66
doi>10.1145/3014812.3014880
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Telling stories about our daily lives is one of the most ubiquitous, consequential and seamless ways in which we socialize. Current narrative generation methods mostly require specification of a priori knowledge or comprehensive domain models, which ... expand

Exploring the feasibility of diegetic in-game store user interfaces
Harley Ogier, Jim Buchan
Article No.: 67
doi>10.1145/3014812.3014881
Full text: PDF

Diegetic (stock-on-shelf) user interfaces may offer advantages, such as increased player immersion, compared to non-diegetic (list-based) in-game store interfaces. One way to evaluate this hypothesis would be to have a single game store with both diegetic ... expand

A trust model based energy detection for cognitive radio networks
Fan Jin, Vijay Varadharajan, Udaya Tupakula
Article No.: 68
doi>10.1145/3014812.3014882
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In a cognitive radio network (CRN), energy detection is one of the most efficient spectrum sensing techniques for the protection of legacy spectrum users, with which the presence of primary users (PUs) can be detected promptly, allowing secondary users ... expand

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Nicholas R. Rodofile, Kenneth Radke, Ernest Foo
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doi>10.1145/3014812.3014883
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Sriram Raghavan, Udaya Parampalli, S V Raghavan
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doi>10.1145/3014812.3014884
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Shu Cheng, Vijay Varadharajan, Yi Mu, Willy Susilo
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RFID Grouping proof convinces an offline verifier that multiple tags are simultaneously scanned. Various solutions have been proposed but most of them have security and privacy vulnerabilities. In this paper, we propose an elliptic-curve-based RFID grouping ... expand

cy preserving in big data sets through multiple shuffle
ang Qu, Jiyang Xu, Shui Yu
Article No.: 72
doi>10.1145/3014812.3014886
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Big data privacy-preserving has attracted increasing attention of researchers in recent years. But existing models are so complicated and time-consuming that they are not easy to implement. In this paper, we propose a more feasible and efficient model ... expand

Game theory based privacy preserving analysis in correlated data publication
Xiaotong Wu, Wanchun Dou, Qiang Ni
Article No.: 73
doi>10.1145/3014812.3014887
Full text: PDF

Privacy preserving on data publication has been an important research field over the past few decades. One of the fundamental challenges in privacy preserving data publication is the trade-off problem between privacy and utility of the single and independent ... expand

Target: category-based android malware detection revisited
Jiaping Lin, Xingwen Zhao, Hui Li
Article No.: 74
doi>10.1145/3014812.3014888
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Smartphones are becoming increasingly popular in daily routines around the world. However, malware in smartphones is getting more prevalent, and will introduce potential risks to smartphone users. In this paper, we propose a new system, called Target, ... expand

Entropy-based detection of botnet command and control
Toby J. Richer

Article No.: 75
doi>10.1145/3014812.3014889
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Any malware designed to be controlled by a remote system (as required for a botnet) must establish command and control (C&C) with that system. As part of establishing and maintaining C&C, botnet malware will often send regular messages to the ... expand

Certificateless public verification scheme with privacy-preserving and message recovery for dynamic group
Longxia Huang, Gongxuan Zhang, Anmin Fu
Article No.: 76
doi>10.1145/3014812.3014890
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Public auditing is a topic issue as it makes a third party auditor replace user to verify the data integrity. Hence, it handles users' problems such as cannot be on-line all times and with constrained computing resources. However, this technology may ... expand

Evolving concurrent systems: behavioural theory and logic
Klaus-Dieter Schewe, Flavio Ferrarotti, Loredana Tec, Qing Wang, Wenya An
Article No.: 77
doi>10.1145/3014812.3017446
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A concurrent system can be characterised by autonomously acting agents, where each agent executes its own program, uses shared resources and communicates with the others, but otherwise is totally oblivious to the behaviour of the other agents. ... expand

Energy-efficient human activity recognition for self-powered wearable devices
Sara Khalifa
Article No.: 78
doi>10.1145/3014812.3018840
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Advances in energy harvesting hardware have created an opportunity for realizing self-powered wearables for continuous and pervasive human activity recognition (HAR). Unfortunately, the power requirements of the continuous activity sensing using accelerometer ... expand

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