

Event Report on iiWAS 2006 and MoMM 2006, Yogyakarta, December 2006

Eric Pardede

Department of Computer Science and Computer Engineering
La Trobe University, Bundoora, VIC 3086 Australia
E.Pardede@latrobe.edu.au

ABSTRACT

In this paper, we report on two events held in Yogyakarta, Indonesia from 4 – 6 December 2006. These conferences are the Eight International Conference on Information Integration & Web-Services and Applications (iiWAS 2006) and the Fourth International Conference on Advances in Mobile Computing and Multimedia (MoMM 2006).

1. HISTORY OF IIWAS AND MOMM

In 1999, the International Organization for Information Integration and Web-Based Application and Services (@WAS) endorsed an international conference in Yogyakarta, Indonesia. The conference, which was called the International Conference on Information Integration and Web Applications & Web Services (iiWAS), had a vision of encouraging researchers from developing countries to submit their works in the emerging area of information integration on the web and its related applications. Throughout the years, the conference has emerged as a major event and has gained a well-respected reputation as an international conference with global participation without losing its original vision of supporting early researchers and researchers from developing countries.

In 2003, iiWAS was held along with a new conference called the International Conference on Advanced in Mobile Multimedia (MoMM). This was a response to the emergence of multimedia research in mobile computing. Since then, the two conferences have been co-located and organized by @WAS. The conference has been renamed the International Conference on Advances in Mobile Computing and Multimedia, to promote opportunities of research in a broader area of mobile computing and multimedia.

In 2006, when iiWAS conference is being held in the city where it began, @WAS expanded the conferences audiences to much broader areas by organizing five (5) workshops along with the two main conferences. The workshops vary from interest in Broadband and Wireless Computing, Communication and Applications (BWCCA), Mobile Multimedia Information Retrieval (MoMIR),

Semantic Information Integration on Knowledge Discovery (SIK), Systems-On-Chips (SoC) to Trustworthy Ubiquitous Computing (TwUC).

2. KEYNOTE TALKS

During the three days of the event, five keynote talks were presented. Gabriele Kotsis from Johannes Kepler University Linz presented a session on the emergence of user-oriented Quality of Service (QoS) as opposed to technical-point-of-view QoS. The talk outlined the associated research challenges and gave an overview on the existing solutions and approaches towards user perceived QoS concepts [1].

Elizabeth Chang presented a talk on digital ecosystem, which is a new-networked architecture and collaborative environment that addresses the weakness of client-service, peer-to-peer, grid and web services [2]. In this talk, the speaker provided a detailed explanation of the system including the architecture, swarm intelligence, design and implementation, its comparison to existing networked architecture, social, cultural and economic impact and also provided practical examples.

In his talk, Andreas Langegger presented the opportunities of ontologies for electronic data integration. While XML family of standard use syntactic rules enables data integration, ontologies provide answers to using a semantics web approach. This talk set down a discussion on existing misconceptions and also the expectations and potentialities of ontologies [3].

In the next keynote talk in MoMM, Omar Boucelma discussed integration issues for spatial data. There are several challenges posed by spatial data integration such as the lack of accepted standard for spatial and geographic data representation, no standard for spatial data repository, and the problems of semantic impairment during the spatial data integration [4].

The final keynote firstly provides the existing techniques used for ad hoc and sensor networks connectivity and shows how the techniques do not assure a connected

topology. The speakers then proposed a new formula for estimating the critical transmitting range [5].

Despite the different issues discussed, these five keynote talks encapsulated the theme of the conferences. The talks cover methodologies, architecture, qualities, issues, and formulas for information integration.

3. TECHNICAL PROGRAM

Both conferences attracted a large number of submissions from various countries. iiWAS attracted 121 submissions from 30 countries, from which 40 papers were accepted as regular papers (33% acceptance rate). In addition, we also accepted 13 papers as short papers. MoMM attracted 64 submissions from 29 countries, from which 25 papers were accepted as regular papers (39% acceptance rate) and 8 papers were accepted as short papers.

This year, many of the iiWAS contributed papers discussed e-applications in various domains such as e-commerce, e-government, e-learning and e-counselling. Web services, web databases and ontologies were also widely discussed during the conference. As in previous years, human-computer interaction aspects were also represented in this conference. [6] defines a formal approach that models worker behaviors in an electronic environment. The approach is vital for managerial and marketing purposes, resource allocation, and design of efficient and user-friendly web-based platforms and services. This paper was awarded the best paper of iiWAS 2006.

Another area that was extensively discussed during iiWAS 2006 was information integration and retrieval. One of the papers in this area discussed the use of relevance feedback on 3D model similarity retrieval to increase the precision retrieval during objects integration [7]. This paper was awarded best student paper of iiWAS 2006.

For MoMM 2006, the papers were evenly distributed across the area of Mobile Computing and Multimedia, with an increasing tendency for research in wireless sensor networks. One paper in multimedia [8], which discussed the mobility of multimedia flow in heterogeneous networks was awarded best paper in MoMM 2006. Another multimedia paper, which discussed the performance of error detection algorithm of encoded video streams [9] was awarded best student paper.

4. WORKSHOPS

There were five successful workshops held during the event of iiWAS/MoMM 2006. The First International Workshop on Broadband and Wireless Computing, Communication and Applications (BWCCA-2006) embodied the rapid evolution of communication networks. Different kinds of networks with different characteristics and integration exhibited interconnection problems at different levels in the

hardware and software design. This workshop provided a forum for disseminating new ideas in broadband and wireless computing.

The First International Workshop on Mobile Multimedia Information Retrieval (MoMIR-2006) discussed the challenges for more creative content retrieval due to the rapid expansion of digital multimedia data delivered on new generation mobile devices, such as PDA, smart phones and portable audiovisual players.

While iiWAS has continuous interest on information integration, the next workshop focused on information integration for knowledge discovery. The First International Workshop on Semantic Information Integration on Knowledge Discovery (SIK-2006) presented recent works to synergize different views of techniques and policies of future research directions on semantic integration used in knowledge discovery.

The International Workshop on System-On-Chip (SoC-2006) was inspired by the emergence of complex multicore system-on-chips that consist of a large number of IP blocks on the same silicon. The multiple cores increase the challenges for processing loads. This workshop aimed to be the forum for the latest research in the area.

Finally, the First International Workshop on Trustworthy Ubiquitous Computing (TwUC-2006) discussed the dilemma of misuse of information that is supposed to be easily accessible in the pervasive computing era. This workshop covered the security issues that arise to ensure trust in evolving ubiquitous interfaces. In this last workshop, the best workshop paper was chosen. [10] introduced a context authentication proxy for shared devices using spatial reference.

5. MOVING FORWARD

Starting from a small workshop in a developing country with participants from a limited number of regional countries, iiWAS has developed into a reputable global conference. In the last few years, the iiWAS conference has gained a new momentum to move forward. Now, with a sister conference, MoMM, and a list of interesting workshops, the event has served a large scholarly audience.

In the future, following the success in 2006, iiWAS and MoMM will be held in tandem. Workshops will be maintained as they attract a large number of people who have an interest in particular areas of expertise. It is also planned to invite highly-respected speakers to address future conferences. The event should attract more global researchers, while maintaining the same level of support for early researchers and researchers from developing countries.

6. REFERENCES

- [1] Kotsis, G. QoS in Next Generation Internet: Putting the User into the Focus. In the Eight International Conference on Information Integration and Web-Based Applications & Services, *books@ocg.at, Band 214*, (2006), pp. 1-2
- [2] Chang, E. and West, M. Digital Ecosystems A Next Generation of the Collaborative Environment. In the Eight International Conference on Information Integration and Web-Based Applications & Services, *books@ocg.at, Band 214*, (2006), pp. 3-23
- [3] Wagner, R. and Langegger, S. Are Ontologies the Nostrum to Bridge the Semantic Gap?. In the Eight International Conference on Information Integration and Web-Based Applications & Services, *books@ocg.at, Band 214*, (2006), pp. 27-28
- [4] Boucelma, O. Spatial Data Integration on the Web: Issues and Solutions. In the Fourth International Conference on Advances in Mobile Computing and Multimedia, *books@ocg.at, Band 215*, (2006), pp.5
- [5] De Marco, G. and Barolli, L. A Bound for the Connectivity of Ad Hoc and Sensor Networks with Shadowing-Induced Radio Irregularities. In the Fourth International Conference on Advances in Mobile Computing and Multimedia, *books@ocg.at, Band 215*, (2006), pp.231-239
- [6] Geczy, P., Izumi, N., Akaho, S., and Hasida, K. Navigation Space Formalism and Exploration of Knowledge Worker Behavior on Intranet. In the Eight International Conference on Information Integration and Web-Based Applications & Services, *books@ocg.at, Band 214*, (2006), pp. 163-172
- [7] Akbar, S., Kung, J., Wagner, R. and Prihatmanto, A.S. Multi-Feature Integration with Relevance Feedback on 3D Model Similarity Retrieval. In the Eight International Conference on Information Integration and Web-Based Applications & Services, *books@ocg.at, Band 214*, (2006), pp. 77-86
- [8] Ahlund, C., Brannstrom, R., Andersson, K. and Tjernstrom, O. Multimedia Flow Mobility in Heterogeneous Networks Using Multihomed Mobile IPv6. In the Fourth International Conference on Advances in Mobile Computing and Multimedia, *books@ocg.at, Band 215*, (2006), pp.29-38
- [9] Superiori, L., Nemethova, O. and Rupp, M. Performance of a H.264/AVC Error Detection Algorithm Based on Syntax Analysis. In the Fourth International Conference on Advances in Mobile Computing and Multimedia, *books@ocg.at, Band 215*, (2006), pp.49-58
- [10] Mayrhofer, R. A Context Authentication Proxy for IPSec Using Spatial Reference. In Frontiers in Mobile and Web Computing: Proceedings of MoMM2006 and iiWAS 2006 Workshops, *books@ocg.at, Band 216*, (2006), pp.449 - 462