

TF-AAS newsletter



Issue 6: Aug/Sept 2006

The TF-AAS newsletter is produced as a focal point for news concerning the (related) activities of the IEEE Computer Society Autonomous and Autonomic Systems Task Force. If you have any items for the next issue please contact r.sterritt@ulster.ac.uk

DASC 2006



by Yuanshun Dai

The 2nd IEEE International Symposium on Dependable, Autonomic and Secure Computing (DASC'06) took place at Indiana University, Purdue University in Indianapolis between September 29th and October 1st.

http://www.cs.iupui.edu/DASC06/

The aim of the symposium continues to be the advancement of research in Autonomic and Autonomous Computing, Dependability and Reliability, and Network Security. It also seeks solutions to conquer complexity, failures and attacks inherent within today's computerbased systems while preparing the selfhealing and self-protection infrastructure for tomorrow's pervasive and ubiquitous environments.

international symposium collected This research papers on the above research issues from different countries and regions, including the USA, Japan, Korea, China, Taiwan, Spain, India, Germany, Canada, Australia, UK, Sydney, and Hong Kong. The submitted full-length papers went through a rigorous review process: each of the submissions was carefully reviewed by at least three reviewers. According to the review results, the program committee selected 42 papers out of 110 submissions with about 38% acceptance rate. We are also very glad to have Aditya Mathur, Associate Dean and Professor at Purdue University, giving the Keynote Speech.

Proceedings available on IEEE website at: http://csdl2.computer.org/persagen/DLPublica

tion.jsp?pubtype=p&acronym=DASC

DASC'07 cfp: http://www.DASC-conference.org

LETTERS

99% (Biological) Inspiration

by Mike Hinchey & Roy Sterritt

Abstract: This letter is based on a keynote talk and paper given at the IFIP Conference on Biologically Inspired Cooperative Computing -BICC 2006, Santiago, Chile, August 20-25 2006.

It highlights that greater understanding of biology in modern times has enabled significant breakthroughs in improving healthcare, quality of life, and eliminating many diseases and congenital illnesses. Simultaneously there is a move towards emulating nature and copying many of the wonders uncovered in biology, resulting in "biologically inspired" systems. Significant results have been reported in a wide range of areas, with systems inspired by nature enabling exploration, communication, and advances that were never dreamed possible just a few years ago. We warn, that as in many other fields of endeavor, we should be inspired by nature and biology, not engage in mimicry. We describe some results of biological inspiration that augur promise in terms of improving the safety and security of systems, and in developing self-managing systems, that we hope will ultimately lead to self-governing systems.

 Read
 the
 full
 article
 at:

 http://tab.computer.org/aas/newsletter/2006 5/2006-5-tf-aas-letters.pdf
 5/2006-5-tf-aas-letters.pdf

Other Community Events

Sept 3-6:, 3rd Int. Conf. Autonomic and Trusted Computing (ATC'06), Wuhan and Three Gorges, China http://grid.hust.edu.cn/atc06/

œSept 4-8, 4th Int. DEXA WS Self-Adaptive and Autonomic Computing Systems (SAACS06), Krakow, Poland. http://cms1.gre.ac.uk/conferences/saacs06/

œSept 18-21, Int. Conf. Self-Organization and Autonomic Systems in Computing & Communications (SOAS'2006) Erfurt, Germany. http://www.soas2006.org/

œ Sept 18-21, ATAC 2006: First International Workshop on Agent Technology and Autonomic Computing, Erfurt, Germany. <u>http://www.netobjectdays.org/</u>

œSept 25-29, Autonomic Networking 2006 incorp: SMARTNET - INTELLCOMM - IWAN -WAC, Paris – France. www.autonomic-net.org

∞Sept 29th -Oct 1st 2006: IEEE Dependable Autonomic and Secure Computing (DASC'06), Indianapolis, USA <u>http://www.cs.iupui.edu/DASC06/</u>

TF Chair's Column

Welcome to the August-September 2006 issue of our TF newsletter. This period has been even busier than last!!

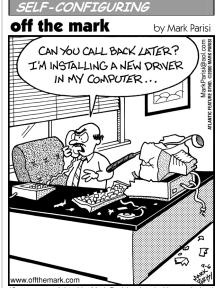
We saw DASC held in September in Indianapolis which represents a merger of several autonomic workshops to form the IEEE International Symposium on Dependable, Autonomic and Secure Computing, marking excellent progress and evolution in our community.

As promised in the last issue, we have a write up on LAACS'06, sponsored in-cooperation by the TFAAS. It was excellent to see this event held in Latin-America.

In this issue we continue with our *letters* section on the theme of expanded AAS keynote presentations with a keynote given IFIP Biologically Inspired Cooperative Computing, August 2006.

Roy Sterritt, Chair TF-AAS r.sterritt@ulster.ac.uk

J Autonomic Properties ::



(Cartoon copyrighted by Mark Parisi, printed with permission.)

Join IEEE TF AAS

If you have not already done so, you are invited to join the IEEE Computer Society Autonomous and Autonomic Systems Task Force online.

Details can be found at the web site

http://www.computer.org/tab/ Where you can sign-up to TF-AAS and three others free

http://www.computer.org/TCsignup/index.htm If you have already signed up, manage your Technical Activity through TECA: http://www.computer.org/services/teca



TF-AAS newsletter



LAACS 2006



by Marcelo Perazolo

The First Latin-American Autonomic Computing Symposium (LAACS) took place on July 18-19th in Campo Grande. MS. Brazil. In this event, the incipient Latin-American Autonomic Computing community met. presented their work and met new people interested in the promise of the autonomic computing vision. The event was organized by members of the Brazilian academia and industry and sponsored by IBM Corporation and PadTec Optical Components and Systems, a Brazilian company focused in the production of optical networking equipment.

This year the event was co-located with one of the biggest conferences in Brazil, the Annual Conference of the Brazilian Computer Society. With this, there was the opportunity to expose the new area (in Brazil) to a big part of the Brazilian academic community, including professors, graduate and postgraduate students. Many new faces showed up in the symposium sessions, which were open to all attendees of the bigger conference free of charge, drawn by curiosity and by the opportunities that Autonomic Computing presents to them. Overall, attendance floated between 30 and 90 people at any point in time, with better participation in the morning sessions (an almost full auditorium).

The event had two distinguished speakers:

- Ric Telford, VP of Autonomic Computing at IBM Corporation, who opened the event with a great keynote speech. In his speech Ric described the current landscaping of Autonomic Computing in the industry and proposed new research challenges aiming at further the state-of-the-art in the field.

With this he expects to engage the Latin-American community to contribute with new solutions and original research.

- John Strassner, Director of Autonomic Networking at Motorola Labs, spent part of the second day delivering a tutorial on Autonomic Computing fundaments and architecture. He also talked about the contributions achieved by his team at Motorola in the area and the research challenges ahead. The main focus of the event consisted of three technical sessions and a poster session where researchers from Brazil and other parts of the World (such as Japan, Canada and the presented their most recent US) achievements. All presentations were of a very high technical standard and passed the scrutiny of a very experienced Technical Program Committee with more than 30 respected members of the international autonomic computing community (and related areas). The resulting acceptance rate was near 32% of the total number of submissions, atesting to the high-quality standard of all selected articles. Accepted papers will also be submitted, reviewed and published by a special issue of the International Transactions on Systems Science and Applications Magazine (ISSN 1751-1461). In addition, there was a special Poster session where authors had the opportunity to show their partial results on promising future work.

Other activities included a demo session and a birds of a feather session, where distinguished participants were invited to answer questions and present their point of view about hot topics in Autonomic Computing and its future, including local aspects of interest to the Latin-American community.

There were also excellent social activities, such as the an opening cocktail and a big dinner event, open to all LAACS and SBC attendees, allowing for an excellent opportunity for the Latin-American Autonomic Computing research community to get together with researchers of other correlate areas. At closing, the best paper was chosen, presented by Prof. Antonio A. F. Loureiro, a full-time professor at the Federal University of Minas in Brazil (UFMG) and co-authors, for their outstanding contribution.

In addition, many freebies were distributed to the audience making up for a very fun and exciting atmosphere and, of course, the invitation to attend the next LAACS in 2007 and submit new original research work !!!



For more information, please refer to the official LAACS 2006 web site at:

http://www.fee.unicamp.br/laacs2006/

Calendar of Community Activity

This section briefly lists some of the additional activity within the community (both within IEEE and beyond) over the forthcoming months.

October 2006

Oct 25-26, MACE 2006, as part of MANWEEK, October 25-26, Dublin, Ireland. http://www.manweek2006.org/mace/

December 2006

Dec 11-13, (*cfp 31 July*), BIONETICS 2006, 1st International Conference on Bio Inspired mOdels of NEtwork, Information and Computing Systems, Madonna di Campiglio, Italy, <u>http://www.bionetics.org/</u>

Dec 20-23, (*cfp ext* 31th July) 14th Int. Conf. on Advanced Computing & Communications (ADCOM 2006). Surathkal, Mangalore, India The theme for ADCOM 2006 is Autonomic Computing

http://www.adcom2006.nitk.ac.in

January 2007

Jan 11-13, (*cfp 31 Aug*), CCNC 2007, Special Session on Autonomic Communications, at IEEE Consumer Communications and Networking Conference, Las Vegas, Nevada, USA. <u>http://www.ieee-ccnc.org/2007/</u>

& Jan 15st : Special Issue Journal on Autonomic Systems' Concepts in Advanced Grid Systems to be published in Multi-Agent and Grid Systems - An International Journal <u>http://www.infj.ulst.ac.uk/~autonomic/mags/</u>

March 2007

Mar 6-8, (*cfp tba*) 3rd IEEE Systems and Software Week, Baltimore · Maryland, USA, <u>http://www.systemsandsoftwareweek.org</u>

Mar 11-15; (*cfp 8 Sept*) SAC 07: 2007 ACM Symposium on Applied Computing - Special Track on Autonomic Computing, Seoul, South Korea

http://www.it.iitb.ac.in/~umesh/cfp-ac2007.pdf

Mar 21-23, (*cfp 15 Aug*), ISADS 2007 - The 8th International Symposium on Autonomous Decentralized Systems, Sedona, Arizona, USA;

http://asusrl.eas.asu.edu/srlab/activities/isads/

May 2007

May 21-25, *(cfp)* IM 2007: 10th IFIP/IEEE International Symposium on Integrated Network Management, Munich, Germany. http://www.im2007.org