

TC-ECBS newsletter



June 2006 Issue

TC-ECBS newsletter is produced as a focal point for news concerning the (related) activities of the IEEE Computer Society Engineering of Computer-Based Systems technical committee. If you have any items for the next issue please contact ecbs-news@computer.org.

TC Chair's Column

We had an excellent conference in Potsdam. I would like to take this opportunity to thank the local organizing committee based at HPI for all their efforts, in particular Werner Zorn, Matthias Riebisch, :Peter Tabeling, and Rasmus Hofmann and the sponsors HPI and SAP. Once again I must thank our excellent keynote speakers and those who participated in the panel. And last but not least our speakers and participants for making ECBS 2006 such an enjoyable event.

During the conference, discussion continued on how we collaborate outside the annual conference. It is being proposed that we attempt to integrate our various tools to create a suite of tools to be used within the community. If you have any interest in this proposal or any views, please contact myself, Roy or Ted Bapty (bapty@isis.vanderbilt.edu).

If you didn't make it to the conference, we hope to have the opportunity to welcome you back next year in Tucson.

Byron Purves, chair ECBS-TC

Join TC ECBS

If you have not already done so, you are invited to join online the IEEE Computer Society Engineering of Computer-Based Systems Technical Committee.

Details can be found at the web site http://www.computer.org/tab/

where you can sign-up to TC-ECBS and three others free

 $\underline{http://www.computer.org/TCsignup/index.htm}$

If you have already signed up, manage your membership at:

http://www.computer.org/services/teca

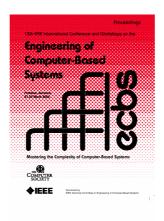
ECBS 2007 – First Announcement

ECBS 2007 will be in **Tucson** – the call for papers will be issued soon – so get writing!.

Did you miss the previous issue? Check out:

www.infj.ulst.ac.uk/~tc-ecbs/newsletter/last/

ECBS 2006



This year's international conference took place in the beautiful Potsdam, just outside Berlin, Germany in March with 120 participants. The conference theme was "Mastering the Complexity of Computer-Based Systems".

The first of the Keynote presentations was given by Bryon Purves were he related his long experience of Systems Engineering from within Boeing, with key lessons that the majority of people that now talk about "Systems" are not thinking big or complex enough.

The next two excellent keynotes marked the latest research trend spreading throughout Europe and in particular within Germany – Automotive Software/Systems Engineering. Klaus Grimm from DaimlerChrysler's Research and Technology gave a talk entitled "Trends and Challenges in Automotive Software Engineering". While Philipp Harrschar from Xcc Software AG focused on "Future Trends of Embedded Software for Automotive Systems".

The last keynote, as part of the EASe (Engineering of Autonomic Systems) workshop was given by Sam Lightstone from IBM Canada on "The Need for Ease: Development Principles for Successful Autonomic Computing Projects". More details on his talk can be found at: http://tab.computer.org/aas/newsletter/2006-2/2006-2-tf-aas-letters.pdf

The sessions included all areas of ECBS including the themes Design Evolution; Architectures; Reliability, Safety, Security; Formal Methods, Dependability, Modeling and Analysis of Complex Systems. System Assessment, Testing and Metrics, Verification and Validation; Distributed Design; Systems Adaptive Computing; Product Family Models and Architectures. The conference also had a successful Doctoral Symposium, Industrial Track and Poster Section. If you wish read the papers doi: 10.1109/ECBS.2006.1 or please see check online at Computer.org:

http://doi.ieeecomputersociety.org/10.1109/ECBS.2006.1

The workshops held at this years conference included:

1. 3rd Engineering of Autonomic Systems, see www.ulster.ac.uk/ease;

doi:10.1109/EASE.2006.18 or

http://doi.ieeecomputersociety.org/10.1109/E ASE.2006.18

- 2. The Joint Workshop:
- Model-Based Development of Computer-Based Systems, see www.proinf.de/mbd and
 Model-based Methodologies for Pervasive and Embedded Software, see www.di.uminho.pt/mompes
- 3. System Testing and Validation, see syst.eui.upm.es/conference/stv06

An excellent social calendar took place around the conference. This included dinners at Schloss Glienicke restaurant, Krongut restaurant and Meierei restaurant. As well as tours of Potsdam. *Please see brief snapshots overleaf.*

Special Issue Journal from ECBS 2004 – EASe workshop published

May 2006 saw a special issue of IEEE Transactions on Systems, Man and Cybernetics hit the press. The Special Issue on "Engineering of Autonomic Systems" was produced from the best papers from ECBS-EASe 2004 (in Bruno) and a general call for papers to the Autonomic Systems community.

Full reference Sterritt R, Bapty TA, (May 2006) *Editors,* IEEE TRANSACTIONS ON SYSTEMS, MAN AND CYBERNETICS—PART C APPLICATIONS AND REVIEWS, Special Issue on the Engineering of Autonomic Systems, Vol. 36, No. 3, IEEE, ISSN 1094-6977, Pages 277-381.

The issue can be accessed through the doi:10.1109/TSMCC.2006.871567 (i.e. url: $\frac{\text{http://dx.doi.org/10.1109/TSMCC.2006.87156}}{\textit{I}}).$

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Snapshot Memories of ECBS 2006





Sans Souci



Panel discussion on "Will MDA Really Work?"



International participation- a pin for home countries...



HPI - conference location



Welcome Guard at the Restaurant



a remaining piece of the wall in Potsdam



Potsdam Tour



engineering a broken CBS to get free from the carpark...