

**Call for contributions (papers)**  
One Day  
**Workshop on “Dependable Embedded Systems”**  
**“Dependable Smart Systems: Research, Industrial Applications,  
Standardization, Certification and Education”**

Aug. 28<sup>th</sup>, 2007, Lübeck, Germany

at the 33<sup>rd</sup> EUROMICRO Conference on Software Engineering and Advanced Applications  
(SEAA 2007) and the 10<sup>th</sup> EUROMICRO Conference on Digital Systems Design (DSD 2007),  
Lübeck, Germany

**ERCIM Working Group** on “Dependable Embedded Systems”  
in co-operation with EUROMICRO and the European Integrated Project **DECOS** (“**Dependable  
Embedded Components and Systems**”, IST-FP6-511764, DECOS Interest Group)

## **CALL FOR PAPERS**

Workshop Website: <http://www.itk.ntnu.no/misc/ercim/> ; <http://its.arcs.ac.at/ercim/>  
DECOS reference website: <http://www.decos.at>

Our everyday life is already “embedded” in an environment of hidden computers, and comfort as well as safety and security rely very much on these. Thus dependability in a holistic manner becomes an important issue. Technology is developing very fast, and demanding challenges have to be met by research, engineering and education. Smart (embedded) systems are regarded as the most important computer application field in the years to come, and as a business driver for European industry. They are a targeted research area for European Research Programmes in Framework 7, promoted by ARTEMIS, the “Technology Platform for Advanced Research and Technology for Embedded Intelligence”, and EPoSS (“European Technology Platform on Smart Systems Integration”). Today, far more than 90% of processors are part of embedded systems and not visible as computers as such, and they are starting to become networked more and more to fulfil even more complex tasks.

## **TOPICS for Papers:**

Suggested topics of interest include, but are not restricted to:

- Hardware/Software Do-Design, System-on-Chip Integration
- Optimized Algorithms for Embedded Systems (power management, embedded vision, networks on chip, communication)
- Industrial Applications and Experience (Automotive, Aerospace, Railways)
- Embedded Intelligence, Ambient Assisted Living Applications
- Architectures, Methods, Tools and efficient Processes and Procedures for Design and Development of critical systems (hardware, software)
- Verification and validation of hardware and software, components and systems.
- Interconnected, networked embedded systems, safety and security interdependencies
- Time triggered systems
- Functional Safety Standards and Assessment, Evaluation and Certification/Qualification
- Use/integration of COTS hardware and/or software as well as of legacy systems
- Education and Training in the area of Dependable Smart Systems

In particular, we encourage submissions demonstrating the potential of new approaches by providing case studies, experiments as well as experience and/or quantitative data, from academic, research and industry as well. A session will be reserved to tell and talk about education/training with respect to efficiently meet the demand of holistic embedded systems engineers in the future. Papers will be peer reviewed by the IPC (International Program Committee).

## **INCREASED VISIBILITY of CONTRIBUTIONS (PAPERS and DISCUSSIONS)**

Draft proceedings will be made available to participants one week in advance at the web site of the workshop. Paper-copies of abstracts will be distributed to all participants at the SEAA/DSD conferences. Issues and results from the discussions at the workshop will, after a short review by the contributors to the discussions, be included in the final publication. (Discussion contributors will be given credit for this as far as possible). The print-and-bound final publication will be published by ERCIM, with an ISBN number, and then sent to ALL participants of both workshop and SEAA/DSD. Afterwards it will be permanently available as .pdf from the ERCIM official web-site ([www.ercim.org](http://www.ercim.org)).

## **SUBMISSION OF PAPERS**

Prospective authors are encouraged to submit a PDF or Postscript version of their paper by email to [ercim@itk.ntnu.no](mailto:ercim@itk.ntnu.no) or to the chairpersons. Papers should be of 6 - 8 pages in IEEE/CS proceedings format (8.5" x 11", two-column format, see link/template on ERCIM Workshop Webpage) and include an abstract of up to 150 words. Papers must not have been previously published or submitted elsewhere in parallel with this. If accepted, the paper must be personally presented by one of the authors. The presenting author(s) must pre-register at least for the workshop before August 20<sup>th</sup>. The following declaration should be sent with the paper (included at the end of the paper, after the references):

### **Declaration:**

All necessary clearances for the publication of this paper have been obtained. If accepted, the author will present the paper at the conference and will prepare the final manuscript in time for inclusion in the conference proceedings.

## **IMPORTANT DATES**

Submission of regular papers: July 31, 2007 (extended deadline)

Notification of acceptance: August 14<sup>th</sup>, 2007

Registration of Authors for workshop: August 20<sup>th</sup>, 2007.

Papers made available for all participants at workshop web site: August 21<sup>st</sup>, 2006

Camera-ready paper due: September 28<sup>th</sup>, 2006 for post-conference proceedings

## **REGISTRATION**

Registration is via the same webpage as for EUROMICRO DSD or SEAA, because the workshop is collocated with these conferences. You can participate and register for the workshop only (free participation), although it would be a pity to miss Euromicro SEAA or DSD!

## **CONFERENCE VENUE**

For details on the Euromicro Conference see [www.euromicro.org](http://www.euromicro.org)

## **WORKSHOP ORGANIZERS**

Amund Skavhaug  
The Norwegian University of Science and Technology  
Department of Engineering Cybernetics  
skavhaug@itk.ntnu.no

Erwin Schoitsch  
ARC Seibersdorf research,  
Information Technologies  
Donau-City-Straße 1, TechGate  
A-1220 Vienna, Austria  
Erwin.schoitsch@arcs.ac.at