

Call for Papers

15th Annual IEEE International Conference and Workshops on the Engineering of Computer Based Systems (ECBS 2008)

sponsored by the IEEE Technical Committee on ECBS

www.ulster.ac.uk/ecbs

co-located with 13th IEEE International Conference on Engineering of Complex Computer Systems (ICECCS 2008)



March 31st – 4th April, 2008
At the Odyssey, Belfast, Northern Ireland
Hosted by the University of Ulster

“Making Systems More Effective...”

ECBS 2008 will be the 15th formal IEEE sponsored meeting dedicated to formulating and advancing methods, techniques and tools for the engineering of computer-based systems. The conference is devoted to the design, development, deployment, and analysis of complex systems whose behaviour is largely determined or controlled by computers. Such systems are characterized by functional, performance, and reliability requirements that mandate the tight integration of information processing and physical processes.

ECBS has many facets that include system modelling, requirements specification, simulation, architectures, communications, safety, security, reliability, software, hardware, human computer interfacing, system integration, verification and validation, and project management. Effectively, ECBS integrates several disciplines, including software, hardware, and communications, into a complete systems engineering approach.

The conference provides a bridge between industry and academia, blending academic research and industrial developments. Papers are sought which reflect this theme, in fundamental ECBS technologies, or application domains, as listed below.

- Adaptive Computing
- Agile Development
- Architectures
- Autonomic Systems
- Co-design
- Component-Based System Design
- Design Evolution
- Distributed Systems Design
- ECBS Infrastructure (Tools, Environments)
- Education & Training
- Embedded Real-Time Software Systems
- Lifecycle Processes & Process Evolution
- Integration Engineering
- Model-Based System Development
- Modelling and Analysis of Complex Systems
- Open Systems
- Product-Families Models and Architectures
- Reengineering & Reuse
- Reliability, Safety, Dependability, Security Requirements Elicitation and Analysis
- Standards
- System on a Chip
- System Assessment, Testing and Metrics
- Verification & Validation

Reports of practical solutions, trends and new system characteristics for ECBS, taking an integrated systems approach, may include application domains such as: Aerospace Systems, Command and Control, Continuous and Discrete Manufacturing, Environmental Systems, Instrumentation and Control Applications, Internet Technology and Applications, Intelligent Highway-Vehicle Systems (IHVS), Medical Systems, and Telecommunications.

WORKSHOPS: ECBS 2008 is hosting three workshops:

1. MDB: Model-Based Development for Computer-Based Systems (www.proinf.de/mbd)
2. EASe: Engineering of Autonomic and Autonomous Systems (www.ulster.ac.uk/ease)
3. ASP: Agility in the Software Process (www.cs.qub.ac.uk/asp2008)

The workshops include short presentations and a forum for focused discussions. Traditionally, at ECBS conferences, workshops are strongly connected to the conference sessions to enable continued in-depth discussions.

POSTER SESSIONS: Posters and abstracts presenting work in progress are invited for a poster session. Accepted abstracts will be published in the proceedings. Graduate students are especially welcome to participate.

DOCTORAL SYMPOSIUM: The Doctoral Symposium provides a forum for PhD candidates to present work in progress and get feedback from the research community.

INDUSTRIAL TRACK: The industrial track provides a forum for short papers on results of industrial research and development.

SUBMISSION OF PAPERS: Full papers and Doctoral Symposium papers must be 6 to max 10 pages in Computer Society Format, poster abstracts 1 to 2 pages and industrial track papers 2 to 4 pages. For further information see the conference web site.

IMPORTANT DATES:

Submission of titles and abstracts	1 November, 2007
Submission of all papers	8 November, 2007
Notification of acceptance	15 December 2007
Camera-ready material for publication	11 January 2008
Registration deadline for authors	11 January 2008
Early registration deadline for non-authors	26 February 2008

Submission dates for workshop papers may differ, so please check separate Calls for Papers on the workshop websites.

General Chair: Roy Sterritt

Program Chair: David Bustard

Local Arrangements Chair: Adrian Moore

Doctoral Symposium Chair: Tim O'Neill

MDB Workshop Chairs: Matthias Riebisch and Bernhard Schätz

EASe Workshop Chair: Roy Sterritt

ASP Workshop Chairs: Des Greer and Philip Taylor

ECBS 2007 Conference Chair: Jerzy Rozenblit

STEERING COMMITTEE

Stephanie White, Byron Purves, Roy Sterritt, Jerzy Rozenblit, Matthias Riebisch, Mike Hinchey, Miroslav Sveda, John Leaney