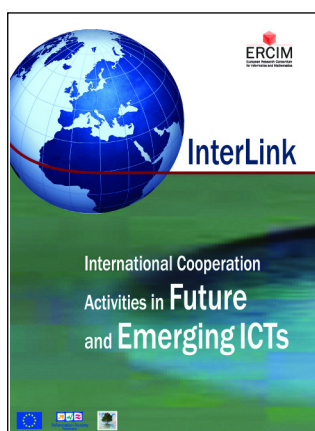# InterLink Research Roadmaps Published

The Coordination Action InterLink (International Cooperation Activities in Future And Emerging ICTs), coordinated by ERCIM and ICS-FORTH, and funded by the Future and Emerging Technologies (FET) Programme of the European Commission, has elaborated research roadmaps for international collaboration in the domains of Software-Intensive Systems and New Computing Paradigms; Ambient Computing and Communication Environments and Intelligent and Cognitive Systems.

To attract and foster trans-disciplinary research excellence, research programmes involving international cooperation need to be defined around new grand challenges and/or key

InterLink booklet summarising the results of the research roadmaps for international collaboration in the domains of Software-Intensive Systems and New Computing Paradigms; Ambient Computing and Communication Environments and Intelligent and Cognitive Systems.

technological issues that have major economic importance or are derived from major societal drivers. Such programmes should explore visionary research themes, demanding breakthroughs in basic research and engineering in key technologies and investigating radically new uses for technology.

The main goals of InterLink were to:
• bring together internationally renowned scientists and highlight the latest advances in their areas
• facilitate the exchange of experiences and discussion of the latest progress and findings in challenging research problems relevant to the selected thematic areas
• collectively identify new research topics
• link European research communities to the best research carried out in other developed countries in the respective research fields
• enable European researchers to access knowledge, skills and technology available outside the EU
• provide a critical assessment of the advantages and disadvantages of different kinds of international collaboration
• promote European solutions and knowledge worldwide and influence the way in which science and technology evolve internationally
• build new international strategic alliances, wherever this may be of benefit to European efforts
• influence the design of new research programmes to be funded by the EC, and also by other funding agencies worldwide
• broadly disseminate the findings of InterLink at a European and international level.

InterLink has addressed three thematic areas carefully selected based on the need to address the evolution of the Information Society in the next ten to fifteen years and the challenges this imposes on computing, software engineering, cognition and intelligence:
1. Software intensive systems and new computing paradigms
2. Ambient computing and communication environments
3. Intelligent and cognitive system.

For each thematic area, a Working Groupwas established, and these worked in a coordinated fashion. They had a scientifically and geographically balanced participation, involving experts, mainly from the academic and research sectors, representing various research practices and innovation strategies, from Europe, North America, Australia, Asia and the Far East.

The final versions of the roadmaps are available at the InterLink project Web site. A booklet summarising the results is currently being produced and will also be available on the project Web site.

More information:
http://interlink.ics.forth.gr/

New book on Advanced Computational Methods

In November the book Advanced Computational Methods in Science and Engineering was published by Springer, edited by Barry Koren and Kees Vuik. The aim of the book is to show the state-of-the-art in computational science and engineering. It deals with fast and accurate numerical algorithms, model-order reduction, grid computing, immersed-boundary methods, and specific computational methods for simulating a wide variety of challenging problems. Examples of these problems are fluid-structure interaction, turbulent flames, bone-fracture healing, micro-electro-mechanical systems, failure of composite materials, storm surges, and particulate flows. The authors of the chapters are all specialists from the separate disciplines.
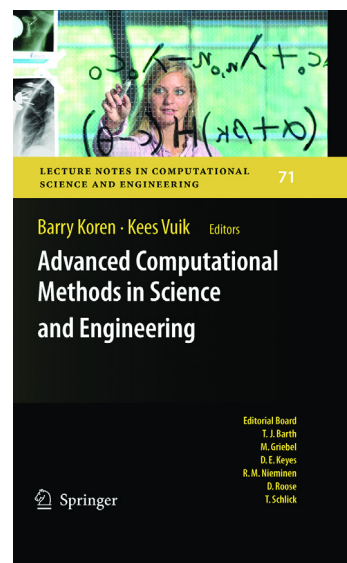
Barry Koren and Kees Vuik (eds.), Advanced Computational Methods in Science and Engineering, Lecture Notes in Computational Science and Engineering, Vol. 71, Springer (2009). 498 p., Hardcover. ISBN: 978-3-642-03343-8.