CALL FOR PAPERS

Special Issue Journal Real-Time Systems

Open Issues in Real-Time Fault-Tolerant Distributed Computing

Guest Editors: James H. Anderson, Gérard Le Lann and Ulrich Schmid

Despite of tremendous scientific advances in fault-tolerant distributed computing and real-time computing, the intersection of the three areas, namely networked distributed systems, real-time systems, and fault-tolerant systems, is still a relatively unexplored field. In fact, there are few results – i.e., specifications of problems, of solutions, companion proofs – regarding concurrent computations bound to meet timeliness constraints in the presence of failures, using system models that achieve high coverage in next-generation wired or wireless networked systems.

The above mentioned special issue of *Real-Time Systems* shall provide a forum for disseminating new scientific results and insights in this challenging domain, and shall stimulate mutual interest in both the distributed computing and real-time systems communities. Original theoretical and applied/practical papers related—but not restricted—to related topics such as:

- o New computational and system models for fault-tolerant distributed real-time computing
- o Composability issues with distributed fault-tolerant algorithms and real-time schedulers
- o Timely and atomic computations in systems/networks of mobile nodes
- o Coverage and performance analysis
- o Scheduling, worst-case feasibility conditions and response time analysis in the presence of failures
- o Transient failures, transient overloads and timeliness in distributed real-time embedded systems
- o Asynchronous distributed algorithms and real-time
- o Formal specification and verification of fault-tolerant distributed real-time systems
- o Challenging applications

are sought.

Please submit your manuscripts **before February 1, 2007** using Springer's Editorial Manager http://time.edmgr.com (in one of the formats accepted by the publisher, see the instructions on the web site). In case of problems or further questions, please consult one of the guest editors:

Prof. James H. Anderson
Univ. of North Carolina at Chapel Hill

anderson@cs.unc.edu

Dr. Gerard Le Lann
INRIA Rocquencourt

Gerard.Le_Lann@inria.fr

Prof. Ulrich Schmid TU Vienna s@ecs.tuwien.ac.at

Notification of acceptance will occur by April 15, 2007. The final version of the manuscript will be due by June 30, 2007. The special issue will appear in December 2007.