CALL FOR PAPERS

The First International Workshop on Reliability and Autonomic Management in Parallel and Distributed Systems (RAMPDS-05)

July 20-22, 2005

Fukuoka Insititute of Technology (FIT), Fukuoka, Japan

in conjunction with **the 11th IEEE International Conference on Parallel and Distributed Systems**

http://www.cs.iupui.edu/~ydai/RAMPDS05/RAMPDS05.htm

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PURPOSE AND SCOPE

Most parallel and distributed systems become increasingly large and complex, thereby compounding many reliability problems. Too often computer systems fail, become compromised, or perform poorly. Thus, it is necessary to develop new technologies to effectively analyze, evaluate and improve the reliability of those complicated systems. Not only should the reliability of system components be improved, but also the management over the whole system. One of the most interesting technologies for high-level management is the Autonomic Management which is inspired by nature and biological systems (such as the autonomic nervous system) that have evolved to cope with the challenges of scale, complexity, heterogeneity and unpredictability by being decentralized, context aware, adaptive and resilient. This new era is characterized by self-defining/configuring/optimizing/protecting/healing, context aware and anticipatory.

This workshop is to bring together computer scientists, industrial engineers and researchers to discuss and exchange experimental or theoretical results, novel designs, work-in-progress, experience, case studies, and trend-setting ideas in the area of reliability and autonomic management systems. The accepted papers will be published by IEEE Computer Society Press as the ICPADS-05 workshop proceedings.

Topics of interest include (but are not limited to)

- Design for system reliability
- Theories of autonomic computing design
- Survivability and security quantification
- Self-healing/self-protecting & fault-tolerant systems
- Software & hardware reliability
- Software aging and rejuvenation
- Reliability measurement, modeling and evaluation
- Tools and techniques for designing, analyzing and building autonomic systems and networks
- Tools for design and evaluation of reliable systems
- Implications of emerging technologies on reliable system design
- Application-specific reliable system
- Enabling technologies for self-managing systems
- Reliable communication system
- Economic, biological and social models used for autonomic communications
- Sensing, monitoring and measurements for self-managing systems and networks
- Languages, development and securely programmable environments for autonomic communications systems
- Human interaction with autonomic systems
- Advanced information processing techniques for autonomic communications

IMPORTANT DATES:

Paper Submission Due:	Feburary 28, 2005
Notification of Acceptence:	March 22, 2005
Final Manuscript Due:	April 21, 2005

PAPER SUBMISSION:

Authors should send one copy of paper in either PS or PDF file at most 6 pages according to IEEE CS format to Dr. Yuanshun Dai via (ydai@cs.iupui.edu).

JOURNAL

After RAMPDS-05, distinguished papers that are presented will be published in a special issue at Journal of Computer Science.

For further questions please contact: Yuanshun Dai, RAMPDS-05 Program Co-Chair (ydai@cs.iupui.edu).

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For further questions please contact: Yuanshun Dai, RAMPDS-05 Program Co-Chair (ydai@cs.iupui.edu).