CfP - SAACS07 '5th International Workshop on Self-Adaptive and Autonomic Computing Systems-2007'

will be held in conjunction with Dexa International Conferences <u>http://www.dexa.org</u> in Regensburg, Germany; September 3-7, 2007. For further & up-to-date info visit URL: <u>http://cms1.gre.ac.uk/conferences/saacs07/</u>

Aims & Scope

This workshop series which started in 2003 is one of the very first events in the autonomic computing / dynamic /selfmanaged systems field. At the turn of the millennium, IBM, Microsoft, SUN, HP, Intel, Cisco and others suggested the need for self-managed complex IT systems. Since then the area has grown and became vibrantly active with continually expanding research in academia and R & D in vendors and industry alike. The challenges faced by the scientific community in this nascent field do cut across many disciplines and require the collaboration and cross fertilisation of ideas on a scale beyond the capacity of one or few enterprises. This workshop aims to bring together diverse ideas in the hope that cross-fertilisation results from the interactions during and after the workshop and hence inspire better solutions. To this end the workshop aims to mix industrialists, academics and interested parties. It does not only provide a forum for the presentation of innovative work, but also endeavours to feature audience-interactive panel sessions. Thus it provides opportunities to debate and brainstorm in a uniquely meaningful yet informal setting. Papers of interest for the workshop should show and highlight individual themes or interactions between them, between technologies, tools & techniques. Papers and posters/demos showing examples of implemented commercial and industrial applications, as well as experimental prototypes are also welcome. All papers are peer reviewed by three reviewers from the TPC.

Themes and Topics

The TPC for SAACS07 calls for original papers covering research or industrial contribution with some tangible results. The papers must not have been published elsewhere or under simultaneous consideration for publication in another conference, workshop or elsewhere! These include but are not limited to the following:

<u>1. Autonomic requirements & features:</u> Self-star features: Self-healing, Self-protecting, Self-optimizing, Self-configuring autonomic systems; Reliability, dependability and adaptability, issues and research directions for using 'future' complex platforms (multi-core processors & multi-gigabit I/O interfaces, ...)

<u>2. Autonomic projects & Application Systems</u>: Analytics/BI 2nd generation; Banking & financial applications; Data Management & Data Visualisation; Design models and techniques for building Autonomic applications; Economics & Marketing applications; e-business, e-commerce, e-learning; Grid & network management applications; Environmental & geographic information systems; Healthcare & medical applications; Knowledge Discovery applications for Autonomic Computing; Operating systems & software; Process control applications; Autonomic Planning; Supply chain management; Vertically-integrated applications

<u>3. Autonomic Software Engineering</u>: Autonomic frameworks of large parallel (or cluster) systems with interaction among nodes; Interaction and communication between components with a focus on messaging mechanisms to achieve autonomic systems, including services, P2P, etc; Frameworks for a single autonomic system and interaction among its components; programming languages/models to efficiently program autonomic systems & applications

<u>4. Quality criteria, Metrics, Benchmarks & Measurements</u> : Benchmarks, Measurement and Metrics; Balancing desirable properties; Managing autonomic systems; Simulating autonomic behaviour

5. Web Services, Semantic web and Ontology: Ontology & Metadata issues; Web-services and their use in autonomic computing; Description, negotiation and discovery, of service; Networks & Grid services; QOS issues

<u>6. AI, Nature-inspired Autonomicity and Emergent Technology</u> : AI techniques and algorithms redeployed in autonomic systems; Intelligence: inherent and lightweight (autonomic systems mimics natural self-managing systems); Nature-inspired computing and other emergent technologies; Agent Learning in ACS and applications of CBR

7. <u>Practical Experience using vendors' specific products</u> (e.g. Dynamic Systems, ETTK, etc...) Development, Analysis, design and deployment of prototype or production autonomic application systems using one of these products.

<u>8. Education and training</u> Designing & operation of graduate or industrial courses in autonomic computing and managing complex systems; model curriculums for such programmes; experience and lessons learnt.

IMPORTANT DATES

- * Submission of abstracts: March 10, 2007
- * Submission of full papers: March 24, 2007
- * Notification of acceptance: April 28, 2007
- * Camera-ready copies due: May 31, 2007

PROGRAMME Committee

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