Workshop theme

The theme of this workshop is the design and evolution of autonomic software, and we will investigate concepts, methods, techniques, and tools to this end. Autonomic computing aims to reduce the complexity of managing software systems. To be autonomic, a system must configure and reconfigure itself, continually optimize itself, recover from malfunction, or protect itself, while keeping its complexity hidden from the user. Understanding software engineering issues is critical for the proliferation of autonomic applications.

Workshop goals

- Understand software engineering issues for autonomic computing systems, critical for software and information technology sectors
- Focus on software engineering issues, i.e., how do we design, build, and evolve such software systems so that they can meet given—and evolving—requirements for particular classes of users and/or applications.
- Exchange opinions, advance ideas, and discuss preliminary results among researchers and practitioners who investigate concepts, methodologies, and tools to design and evolve autonomic software.

Paper submission

We invite (1) position papers and progress reports that describe ongoing work or new ideas, (2) short research papers and experience reports that describe validated research results, and (3) survey papers --- all within the scope of the workshop. Papers should be between 4-7 pages long and must not have been previously published or submitted elsewhere.

Please submit papers for DEAS 2005 electronically using CyberChairPROv6 (see web site for details).

Accepted papers will be published in the ACM Digital library under DEAS 2005 workshop proceedings as part of the ICSE 2005 workshop publications.

Topics of interest (not limited to)

- Architectural styles
- Attribute-based architectural styles and architecture patterns
- Designing high-variability software
- Designing self-managed systems
- Evolving autonomic software
- Injecting autonomicity into legacy systems
- Integration mechanisms
- Methods for evaluating complex tradeoffs
- Adoption of autonomic systems
- Assessing the user experience in self-managed systems.

Applications of interest (not limited to)

- Web services
- Applications involving software that helps people with special needs live their lives
- Software that integrates multiple heterogeneous components, such as an inter-organizational workflow system that coordinates production or service processes
- Autonomic systems serving the information economy.