Scope: ICAC is the leading conference on autonomic computing applications, technology and foundations. Autonomic computing refers to methods and means for reducing the human burden of managing computing systems. Systems introducing new autonomic features are becoming increasingly prevalent, motivating research that spans a variety of areas, from computer systems, architecture, databases and networks to machine learning, control theory, and bio-inspired computing. ICAC brings together researchers and practitioners across these disciplines to address the multiple facets of adaptation and self-management in computing systems and applications from different perspectives. Autonomic computing solutions are sought for grids, clouds, enterprise software, data centers, Internet services, embedded systems, and sensor networks, where resources and applications must be managed to maximize performance and minimize cost, while maintaining predictable and reliable behavior in the face of varying workloads, failures, and malicious threats. Papers are solicited from all areas of autonomic computing, along three main thrusts:

Applications of autonomic computing: Systems contributions and experiences are sought with prototyped or deployed systems and applications that focus on advancing system independence and increasing system ability to adapt to an unpredictable environment. Application areas include but are not limited to:
- Enterprise applications
- Internet services
- Embedded and mobile systems
- Data center or large-scale system management
- Energy management
- Sensor networks, especially issues related to autonomous, distributed management
- Internet of things
- Other applications of autonomic computing to real world problems in science, engineering, business and society

Autonomic computing components and services: Papers are sought that describe protocols, system-level support, services, or application components that enhance aspects of system autonomy, self-management, self-tuning, self-configuration, self-diagnosis, and self-healing, or improve adaptive capabilities. Examples include:
- Autonomic management of resources, workloads, faults, power/thermal, and other challenges
- Management of quality of service, including security and dependability
- Self-managing components, such as servers, storage, network protocols, or specific application elements
- Monitoring systems for autonomic computing
- Virtual machine, operating systems, hardware or application support for autonomic computing
- Novel human interfaces for monitoring and controlling autonomous systems
- Management topics, such as specification and modeling of service-level agreements, behavior enforcement and tie-in with IT governance
- Toolkits, frameworks, principles and architectures, from software engineering practices and experimental methodologies to agent-based techniques and virtualization

Algorithms, theory and foundations of autonomic computing: Analytic foundations are solicited for building efficient autonomic systems, predicting their behavior, quantifying their performance, analyzing their stability, guaranteeing their specifications, or optimizing their efficacy. These include:
- Decision and analysis techniques and their use, such as machine learning, control theory, predictive methods, emergent behavior, self-organizing networks, rule-based systems and bio-inspired techniques
- Fundamental science and theory of self-managing systems: understanding, controlling or exploiting system behaviors to enforce autonomic properties
- Algorithms, analysis and theory for performance guarantees
- Foundations of self-diagnostic systems

Papers will be judged on originality, significance, interest, correctness, clarity and relevance to the broader community. Papers in the first two thrusts should report on experiences, measurements, user studies, or other evaluations, as appropriate. Evaluations of a prototype or large-scale deployment of autonomic systems and applications is expected. Papers in the third thrust should provide new fundamental insights into relevant autonomic computing problems.

Paper submission:
Full papers (a maximum of 10 pages) and posters (2 pages) are invited on a wide variety of topics relating to autonomic computing. Submitted papers must be original work, and may not be under consideration for another conference or journal. Complete formatting and submission instructions can be found on the conference web site. Accepted papers and posters will appear in proceedings distributed at the conference and available electronically. Authors of accepted papers and posters are expected to present their work at the conference.