

ICAC 2015 Call for Papers

<http://icac2015.imag.fr>

12th IEEE International Conference on Autonomic Computing (ICAC 2015)
Grenoble, France, July 7-10, 2015

In cooperation with USENIX and SPEC
Corporate supporters: Google, HP Labs, Orange Labs

IMPORTANT DATES

Paper Submission (extended): January 29, 2015
Author Notification: April 15, 2015
Final Manuscript: May 1, 2015

SCOPE AND TOPICS

ICAC is the leading conference on autonomic computing techniques, foundations, and applications. Large-scale systems of all types, such as data centers, compute clouds, smart cities, cyber-physical systems, sensor networks, and embedded or pervasive environments, are becoming increasingly complex and burdensome for people to manage. Achieving self-management requires and motivates research that spans a wide variety of scientific and engineering disciplines, including distributed systems, artificial intelligence, machine learning, modeling, control theory, optimization, planning, decision theory, user interface design, data management, software engineering, emergent behavior analysis, and bio-inspired computing.

Topics of interest include, but are not limited to:

- Self-managing components, such as compute, storage, networking devices, embedded and real time systems, and mobile devices.
- AI and mathematical techniques, such as machine learning, control theory, operations research, probability and stochastic processes, queueing theory, rule-based systems, bio-inspired techniques.
- End-to-end design and implementation of systems for management of resources, workloads, scalability, availability, performance, reliability, power/cooling, and security.
- Monitoring components and platforms for autonomic systems in IT or cyber-physical environments.
- Hypervisors, operating systems, middleware, and application support for autonomic computing.
- Novel human interfaces for monitoring and controlling autonomic systems.
- Goal specification and policies, IT governance, and business-driven IT management.
- Frameworks, architectures, toolkits (from software engineering practices and to agent-based techniques).
- Automated management techniques for emerging applications, systems, and platforms, including social networks, cloud computing, big data systems, multi-core servers, smart cities, and cyber-physical systems.
- Fundamental science and theory of self-managing systems
- Self-organization and emergent behavior in technical systems trustworthy self-organizing systems.
- Infrastructures and architectures for organic computing systems.
- Online self-integration of complex systems.
- Applications of autonomic computing and experiences with prototyped or deployed systems solving real-world problems in science, engineering, business, or society.

Paper Submission

All papers must represent original and unpublished work that is not currently under review. Papers will be judged on originality, significance, interest, correctness, clarity, and relevance to the broader community. Papers are strongly encouraged to report on experiences, measurements, user studies, and provide an appropriate quantitative evaluation if at all possible. At least one author of each accepted paper is expected to attend the conference.

Papers can be submitted in one of the following three categories with different acceptance criteria for each category:

- Full research papers limited to 10 pages (IEEE format) plus 1 additional page for references
- Experience papers limited to 8 pages (IEEE format) plus 1 additional page for references
- Short papers limited to 6 pages (IEEE format) plus 1 additional page for references

Papers must be submitted electronically in PDF format through the ICAC'2015 submission site: EasyChair <https://easychair.org/conferences/?conf=icac2015> See conference website for format instructions.

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