



IEEE Cloud Computing Call for Papers

Special Issue on Cloud-Native Applications

Submission deadline: 1 March 2017 • Publication date: September/October 2017

IEEE *Cloud Computing* magazine seeks accessible, useful papers for a special issue on Cloud-Native Applications and Architecture. Many applications in enterprises are not able to leverage the advantages of cloud computing without a great deal of refactoring – a process that is costly, time consuming and often producing disappointing results. However, over the last five years we have seen cloud software architectures evolve that promote the design of applications that, from conception to deployment, are envisioned, prototyped and built with cloud tools and cloud resources. These cloud-native applications are born and run in the cloud and follow new classes of design and maintenance patterns.

The purpose of the special issue is to urge the research community to better define and document the cloud-native movement. Topics of interest include but are not limited to:

- Frameworks to make it easier for industry to build cloud-native applications;
- Educational approaches and community based organizations that can promote cloud-native design concepts;
- The tooling to develop cloud-native applications;
- The role of open source for building cloud-native applications;
- VM and container orchestration systems for managing cloud-native designs;
- Cloud-native applications running in hybrid cloud or migrated from one cloud to another;
- Efficient mechanisms to make legacy applications cloud-native;

- Comparing applications – one cloud-native and the other not – in terms of performance, security, reliability, maintainability, scalability, etc.;
- Cloud-native applications for various industry sectors (engineering, financial, scientific, health);
- Cloud-native operating systems and databases; and
- New models for capacity planning and pricing inspired by cloud-native architecture paradigms.

Special Issue Guest Editors

- Roger Barga, Amazon AWS
- Dennis Gannon, Indiana University
- Neel Sundaresan, Microsoft Corporation

Submission Information

Submissions should be 3,000 to 5,000 words long, with a maximum of 15 references, and should follow the magazine's guidelines on style and presentation (see <https://www.computer.org/web/peer-review/magazines> for full author guidelines). All submissions will be subject to single-blind, anonymous review in accordance with normal practice for scientific publications. For more information, contact the guest editors at ccm5-2017@computer.org.

Authors should not assume that the audience will have specialized experience in a particular subfield. All accepted articles will be edited according to the IEEE Computer Society style guide (www.computer.org/web/publications/styleguide).

Submit your papers through Manuscript Central at <https://mc.manuscriptcentral.com/ccm-cs>. Guest Editors



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