WOSC 2017

First International Workshop on Serverless Computing (WoSC)

Welcome to the home page of the 2017 Workshop on Serverless Computing. In conjunction with the 37th IEEE International Conference on Distributed Computing Systems (IEEE **ICDCS 2017**). The workshop will take place in Atlanta, GA, USA on June 5, 2017.

Serverless Computing (Serverless) is emerging as a new and compelling paradigm for the deployment of cloud applications, and is enabled by the recent shift of enterprise application architectures to containers and micro services. Many of the major cloud vendors, have released serverless platforms within the last two years, including **Amazon Lambda**, **Google Cloud Functions**, **Microsoft Azure Functions**, **IBM OpenWhisk**. There is, however, little attention from the research community. This workshop brings together researchers and practitioners to discuss their experiences and thoughts on future directions.

Serverless architectures offer different tradeoffs in terms of control, cost, and flexibility. For example, this requires developers to more carefully consider the resources used by their code (time to execute, memory used, etc.) when modularizing their applications. This is in contrast to concerns around latency, scalability, and elasticity, which is where significant development effort has traditionally been spent when building cloud services. In addition, tools and techniques to monitor and debug applications aren't applicable in serverless architectures, and new approaches are needed. As well, test and development pipelines may need to be adapted. Another decision that developers face are the appropriateness of the serverless ecosystem to their application requirements. A rich ecosystem of services built into the platform is typically easier to compose and would offer better performance. However, composing external services may be unavoidable, and in such cases, many of the benefits of serverless disappear, including performance and availability guarantees. This presents an important research challenge, and it is not clear how existing results and best practices, such as workflow composition research, can be applied to composition in a serverless environment.

Authors are invited to submit research papers, experience papers, demonstrations, or position papers.

The latest version of this CFP is available at **http://serverlesscomputing.org/wosc17/cfp**

Topics

This workshop solicits papers from both academia and industry on the state of practice and state of the art in serverless computing. Topics of interest include but are not limited to:

- Infrastructure and network optimizations for serverless applications

- Debugging serverless applications
- Programming models
- Use cases, experiences
- Benchmarks
- Cost models, pricing models, and economics of serverless
- DevOps (customer side)
- Other topics related to serverless computing

Important Dates

Paper Submission: March 10, 2017
Notification of Acceptance: April 2nd, 2017
Final Camera-Ready Manuscript Due: April 10th, 2017
Workshop Date: June 5th, 2017

Papers and Submissions

Papers must be written in English, and they have to be in PDF or Word format. We are looking for academic papers (up to 6 pages), position, industry experiences (up to 4 pages), or demonstrations (up to 2 pages). All accepted workshop papers are published in one ICDCS 2017 workshops proceeding. Use the same IEEE style as the ICDCS paper in the research track. All submissions should follow the IEEE 8.5" x 11" Two-Column Format. When using LaTeX, we recommend the following format options:
\documentclass[10pt,conference,compsocconf,letterpaper]{IEEEtran}. Each submission must have 10pt font or larger. Papers exceeding their length limit or with smaller fonts will be rejected without review. Submissions should NOT be blinded for review. All paper submissions will be handled electronically by the EasyChair management system.

Electronic Submission: **https://easychair.org/conferences/?conf=wosc2017**

Authors are expected to present their paper at the workshop. At least one author of each paper must register for ICDCS to be included in the workshop program.

Organizers

Paul Castro, IBM Research
Vatche Ishakian, IBM Research
Vinod Muthusamy, IBM Research
Aleksander Slominski, IBM Research

Workshop Chair

Geoffrey C. Fox, Indiana University

Program Committee (Tentative)

Gul Agha, University of Illinois at Urbana-Champaign
Ioana Baldini, IBM Research

Roger Barga, Amazon
Azer Bestavros, Boston University
Flavio Esposito, Saint Louis University
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