

# First International Workshop on Rack-scale Computing

<http://research.microsoft.com/wrsc2014>  
WRSC 2014 is co-located with EuroSys 2014

**Submissions due:**

Sunday February 16, 2014, 11:59 p.m.

**Page limit:** 5**Notification to authors:**

Saturday March 8, 2014

**Final papers due:**

Friday, March 28, 2014

**Workshop:**

Sunday, April 13, 2014. Amsterdam, Netherlands

**Email:**

[wrsc\\_chairs@microsoft.com](mailto:wrsc_chairs@microsoft.com)

**Program Chair:**

- Paolo Costa, Microsoft Research

**General Chair:**

- Dushyanth Narayanan, Microsoft Research

**Program Committee:**

- Gustavo Alonso, ETH Zurich
- Edouard Bugnion, EPFL
- Luis Ceze, U. Washington
- Leendert van Doorn, AMD
- Babak Falsafi, EPFL
- Blake Fitch, IBM Research
- Nathan Farrington, Facebook
- Tim Harris, Oracle Labs
- Michael Kaminsky, Intel Labs
- Parthasarathy (Partha) Ranganathan, Google
- Luigi Rizzo, U. Pisa
- Thomas Wenisch, U. Michigan
- Bernard Wong, U. Waterloo

**About the workshop**

In the near future we will see “rack-scale computers” with 1000s of cores, terabytes of memory, and high-bandwidth, low-latency, internal fabrics. These architectures are driven by the need to increase density and connectivity between servers while lowering cost and power consumption. Enabling technologies such as systems-on-chip (SoCs), glueless fabrics, silicon photonics, and RDMA are already available today as are early prototypes of rack-scale computing architectures from companies such as AMD SeaMicro, HP, and Intel.

The goal of this workshop is to bring together researchers and practitioners from different areas to discuss novel ideas on how to design next-generation rack-scale systems. We invite submissions on hardware, networking, systems design, and applications for rack-scale computing. We especially welcome cross-layer approaches such as hardware-software co-design, and encourage unfinished but potentially ground-breaking research ideas.

Example Topics include but are not limited to:

- Systems-on-chip (SoCs)
- Networks-on-chip (NoCs)
- Rack-scale fabrics: topologies, routing, congestion control
- OS and application design for rack-scale computing
- FPGA-based prototyping and design
- Memory and storage disaggregation
- Coherency, consistency, and fault tolerance
- QoS and virtualization
- Low-energy and/or high-density design



Microsoft Research

Oracle Labs