

## Call for Papers: IISWC 2017

2017 IEEE International Symposium on Workload Characterization (IISWC'17)

<http://www.iiswc.org>

Seattle, WA

October 1-3, 2017

### IMPORTANT DATES

Abstract deadline: ~~May 26~~ June 2, 2017 (11:59:59PM EST)

Paper submission deadline: ~~June 2~~ June 9, 2017 (11:59:59PM EST)

Author notification: August 1st, 2017

Final Manuscript Submission: August 28, 2017

Early Registration Deadline: September 18, 2017

### TOPICS OF INTEREST

We solicit papers in all areas related to characterization of computing system workloads. Topics of interest include (but are not limited to):

Characterization of applications in domains such as

- Cloud, grid, search engines, e-commerce, web, databases, file/application servers
- Embedded, real-time, Edge Computing, mobile and extensible distributed systems, multimedia
- Memory, storage, and file systems
- Life sciences, bioinformatics, scientific computing, finance, forecasting
- Management and/or analytics big data, machine Learning, Analytics, Data mining and other data-intensive computation
- Security, reliability, biometrics
- User behavior and system-user interaction, social computing
- Cyber-physical systems, pervasive computation and Internet of Things (IoT)

Characterization of workload on emerging technology, such as

- Quantum computation and communication
- Near-threshold Computation
- Non-volatile memory

Characterization of OS, Virtual Machine, middleware and library behavior

- Virtual machines, Websphere, .NET, Java VM, databases
- Graphics libraries, scientific libraries
- Operating system and hypervisor effects and overheads

Implications of workloads in design issues, such as

- Reliability, performance, power, security and privacy, scalability, and sustainability
- Processors, memory hierarchy, I/O, and networks
- Performance accelerators, FPGA's, GPU's, etc.
- Near data processing architectures
- Novel architectures (non-Von-Neumann)

Benchmark creation and evaluation, including

- Multithreaded benchmarks, benchmark cloning
- Profiling, trace collection, synthetic traces
- Validation of benchmarks

Measurement tools and techniques, including

- Instrumentation methodologies for workload verification and characterization
- Techniques for accurate analysis/measurement of production systems
- Analytical and abstract modeling of program behavior and systems

### ORGANIZERS:

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