

IISWC 2024 Call for Posters

2024 IEEE International Symposium on Workload Characterization

September 15-17, 2024 Vancouver, BC, Canada

Submissions: iiswc2024posters.hotcrp.com

IEEE International Symposium on Workload Characterization (IISWC) is dedicated to the understanding and characterization of workloads that run on all types of computing systems. This symposium will focus on characterizing and understanding emerging applications in consumer, commercial and scientific computing. IISWC 2024 will be held on September 15-17, 2024, Vancouver, BC, Canada.

Authors are invited to submit extended poster abstracts encompassing ongoing or late breaking research, tools or benchmarks in any of the following fields.

Characterization of applications in domains including:

- Life sciences, bioinformatics, scientific computing, finance, forecasting
- Machine learning, data analytics, data mining
- Cyber-physical systems, pervasive computation and Internet of Things (IoT)
- Security and privacy-preserving computing
- High performance computing
- Cloud and edge computing
- Mobile computing
- User behavior and system-user interaction
- Search engines, e-commerce, web services, and databases
- Embedded, multimedia, real-time, 3D-graphics, gaming
- Blockchain services
- Augmented reality and virtual reality

Characterization of workloads for emerging workloads and architectures, such as

- Quantum computations and communication
- Serverless computing
- Near-threshold computing
- Non-volatile memory
- Near data processing architectures
- Neuromorphic and brain-inspired computing
- Transactional memory systems
- Biology (e.g., DNA sequencing) and chemistry workloads

Characterization of OS, Virtual Machine, middleware and library behavior, including

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

Implications of workloads in system design, such as

- Power management, reliability, security, privacy, performance
- Processors, memory hierarchy, I/O, and networks
- Design of accelerators, FPGAs, GPUs, CGRAs, etc.
- Large-scale computing infrastructures and facilities

Benchmark methodologies and suites, including

- Representative benchmarks for emerging workloads
- Benchmark cloning methods
- 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

Important dates

- Poster abstract submission deadline: Aug 4, 2024
- Poster notification: Aug 16, 2024
- Conference dates: Sept 15-17, 2024

Submission guidelines

- Poster abstract submission website: iiswc2024posters.hotcrp.com
- Page limit: 2 pages, including references, in PDF format. Single-spaced double-column pages using a 10-point size font on 8.5x11 inch using the submission template.
- Submission template: [IEEE Manuscript Templates for Conference Proceedings](#)
- Proceedings: Poster abstracts will NOT be included in the IISWC 2024 proceedings, so that the authors can resubmit their work to a future conference or journal.

This year we will accept poster abstracts in two tracks: regular work-in-progress (WiP) track and PhD forum track. Submissions to both tracks have the same page limit and submission template as mentioned above.

Regular WiP track (double blind)

For this track, we encourage ongoing or late breaking research, tools or benchmarks, and reviewing will be double blind. The content of the poster must be original work that has neither been published before in another conference or journal, nor is currently under review. However, you can submit work that has been presented earlier in a workshop without copyrighted proceedings. Therefore, please do not include any author names on any submitted documents except in the space provided on the submission form. If you refer to your own prior work, please do it in third person, as if you were referencing someone else's work. Submissions that exceed the page limit or do not follow the formatting guidelines will be rejected without review.

PhD forum track (single blind)

For this track, we encourage PhD students to present their thesis research in progress and receive early feedback from senior researchers and experts in the domain. Reviewing on this track will be single blind. The submission should include clear descriptions of the project's motivation, objectives, problem definition, addressed solutions, current status (can include your own published papers), and planned work. Author names (PhD student and their supervisor) should be included in the submitted document and the authors can refer to their own prior work, especially in the addressed solutions and current status sections. Submissions that exceed the page limit or do not follow the formatting guidelines will be rejected without review.