Workshop on Software and Hardware Co-design of Deep Learning Systems on Accelerators (SHDA 2023) – Call for Papers

SHDA 2023 (https://shda-workshop.github.io) will be held in conjunction with ACM/IEEE International Conference for High Performance Computing, Networking, Storage, and Analysis (SC 2023) in the Colorado Convention Center, Denver, Colorado on Sunday, November, 12th, 2023. (https://sc23.supercomputing.org/presentation/?id=wksp159&sess=sess149)

This international workshop is on the software and hardware co-design of deep learning systems on accelerators. To efficiently deploy the state-of-the-art hardware accelerators to meet the diverse demands from scientific domains, software-hardware co-design has become a critical research issue. Our workshop will highlight the latest research and software tools that can deliver higher performance and resource efficiency of deep learning systems, by taking advantage of new architectures and hardware available on the next generation accelerators. Through this workshop, we will provide a platform for researchers to showcase their preliminary results, inspire ideas, explore novel directions, promote collaborations, and enlarge the community. Topics include, but are not limited to:

- Performance modeling of deep learning applications,
- Scalable hyper-parameter optimization,
- Hardware-aware neural architecture search,
- Testing, debugging, and profiling deep learning systems on accelerators,
- Hardware-efficient training and inference,
- Scalability of large-scale deep learning models,
- Automating parallelism for deep learning systems,
- Efficient accelerators for deep learning.

Deadlines
Submission deadline (firm): August 18, 2023 (AoE)
Author notification: September 8, 2023 (AoE)
Camera-ready version deadline (firm): September 29, 2023 (AoE)

Submission Guildlines
- Papers should be submitted electronically via the SC submission system (https://submissions.supercomputing.org/)
- Submitted papers will be evaluated by at least three reviewers and the accepted workshop papers will be published in ACM SC Workshops Proceedings as a separate volume from ACM SC Technical Papers Proceedings.
- Paper submission must use the new ACM proceedings templates at https://www.acm.org/publications/proceedings-template . For Latex users, version 1.90 (last update April 4, 2023) is the latest template, and please use the "sigconf" option.
- SHDA will accept regular papers of 8 pages and short papers of 4 pages, including the references and figures. (The title of a short paper begins with "Short Paper: ".)
- SHDA encourages regular paper submissions to provide artifact description and evaluation of no more than 4 additional pages (i.e. all of a regular paper is up to a total of 12 pages). See details in https://sc23.supercomputing.org/submit/reproducibility-initiative/ .