

*Proceedings of*

# MCHPC'17: Workshop on Memory Centric Programming for HPC



Held in conjunction with

**SC17: The International Conference  
for High Performance Computing,  
Networking, Storage and Analysis**

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## Message from the Workshop Organizers

Welcome to MCHPC'17 workshop! Memory systems of existing and emerging computers have been becoming increasingly complex in recent years. The organizers of this workshop believe it is important to elevate the notion of *memory-centric programming* to utilize the unprecedented and ever-elevating modern memory systems. ***Memory-centric programming*** refers to the notion and techniques of exposing the hardware memory system and its hierarchy, which could include NUMA regions, shared and private caches, scratch pad, 3-D stack memory, and non-volatile memory, to the programmer for extreme performance programming via portable abstraction and APIs. The objectives of this workshop are to bring together researchers working in this area and discuss the state-of-the-art developments in the field.

The detailed workshop program is indicated in the previous page. We would like to thank all authors who submitted papers to this workshop. Special thanks go to the program committee members for providing us with high-quality reviews under tight deadlines. For each submitted paper, we were able to collect at least three reviews. Based on the reviews and discussion among the PC members, a set of two regular papers and one short papers were selected.

We are extremely thankful to our Keynote speaker, Vivek Sarkar from Georgia Tech and our Invited speaker Andy Rudoff from Intel Corporation. Our special thanks to SIGHPC and ACM for publishing the proceedings of the workshop. It has been a pleasure to work with Almadena Chtchelkanova and Luiz DeRose (SC '17 Workshop Chairs) to get this workshop organized. Last but not the least, our sincere thanks are due to the attendees, without whom this conference would not be a success. We hope you will enjoy the program!!

Yonghong Yan, Ron Brightwell and Xian-He Sun, Workshop Organizers and Program Chairs