

Accelerated Data and Computing Workshop

Hosted by Oak Ridge National Laboratory

@ Sheraton San Jose

San Jose, California USA

July 17-18, 2017

–AGENDA–

Monday, July 17, 8:30am – 5:00pm

7:30 – 8:30 AM	Working Breakfast – Milpitas Room	Workshop Participants' Networking
8:30 AM	Welcome & Opening – Silicon Valley Room	Jeff Nichols, Oak Ridge National Laboratory
	Session 1 - Applications	
8:40 AM	Update from Applications Working Group	Rio Yokota, Tjerk Straatsma, Joost VandeVondele
8:45 AM	Accelerated Computing Research Activities of the Information Technology Center, University of Tokyo	Takashi Shimokawabe, University of Tokyo
9:15 AM	HPC and Artificial Intelligence	Michael Houston, NVIDIA
9:45 AM	Portable Heterogeneous High Performance Computing via Domain-Specific Virtualization	Dmitry Liakh, ORNL
10:15 AM	Break	
10:30 AM	Making of High Performance Parallel Applications	Jeongnim Kim, Intel
11:00 AM	Linear algebra tasks in Materials Science: Optimization and Portability	Eduardo Di Napoli -- Jülich Supercomputing Centre
11:30 AM	Communication-Avoiding Algorithms for Linear Algebra and Beyond	Jim Demmel, University of California, Berkeley
12:00 PM	Working Group Lunch – Milpitas Room	Working Groups' Discussions
	Session 2 – Emerging Technologies – Integration and Evaluation	
13:00 PM	Update from Emerging Technologies Working Group	Jeff Vetter, Sadaf Alam, Akihiro Nomura
13:15 PM	Quantum Computing Is and Is Not Amazing	Kenny Rudinger, Sandia National Laboratories
13:45 PM	Neuromorphic Computing at Lawrence Livermore Lab	Adam Moody, Lawrence Livermore National Laboratory
14:15 PM	Emerging Memory and the Impact on Future System Architectures	Steve Pawlowski, Micron
14:45 PM	Break	
15:00 PM	Applications Driven Heterogeneous Architecture: Potential Third Way to Exascale Computing	Giri Chukkapalli, Cavium
15:30 PM	Accelerating Analytics on Intel FPGAs	Mike Strickland, Intel
16:00 PM	Day 1 Wrap Up	Jeff Nichols
16:30 PM	Group Dinner and Activity – Meet in Lobby of Sheraton for Transportation	

Tuesday, July 18, 8:30am – 1:00pm

TIME	DESCRIPTION	PRESENTER
7:30 – 8:30 AM	Working Breakfast – Milpitas Room	Workshop Participants' Networking
8:30 AM	Day 2 Welcome and Logistics – Silicon Valley Room	Jeff Nichols, ORNL
	Session 3 – Resource Management	
8:35 AM	Update from Resource Management Working Group	Stephen McNally, Jim Rogers, Nick Cardo, Toshio Endo
8:45 AM	Cyber Security Challenges with New Technologies	Matt Ezell, Oak Ridge National Laboratory
9:15 AM	Comet - Tales from the Long Tail. Two Years In, and 10,000 Users Later	Shawn Strande, San Diego Supercomputing Center
9:45 AM	The Flux Resource Management	Chris Marrone, Lawrence Livermore National Laboratory
10:15 AM	Break	
10:30 AM	Managing and Deploying GPU Accelerators	Stephane Thiell, Kilian Cavalotti, Stanford University
11:00 AM	HPC in the Enterprise: Design Principles and Practical Applications	Ryan Quick, Providentia Worldwide
11:30 AM	Workshop Review and Next Steps	Jeff Nichols, ORNL
12:00 PM	Working Group Lunch – Milpitas Room	Working Groups' Discussions
	Working Group Breakouts (Invitation Only)	
12:30 PM	<ul style="list-style-type: none"> • Applications – Silicon Valley Room • Emerging Technologies – Fremont Room • Resource Management – Cupertino Room • Governance – Alviso Boardroom 	
16:00 PM	Working Groups' Reports – Silicon Valley Room	
17:30 PM	Meet in Lobby of Sheraton to Arrange Rides to Dinner	
18:00 PM	Working Dinner – Scott's Seafood (http://www.scottsseafoods.com/), Dinner Topic: ADAC Institute Overview and Path Forward with New Partners, Jeff Nichols, ORNL	ADAC Working Groups' Discussions Continue
21:00 PM	End of Day 2	

Wednesday, July 19 – Thursday, July 20, 9:30am – 17:00pm (Invitation Only)

TIME	DESCRIPTION	
8:30 AM	Welcome and Logistics	
8:35 AM	Hackathon	
12:00 PM	Lunch	
1:00 PM	Hackathon continues	

