

## Accelerated Data and Computing Workshop

Ookayama Campus, Tokyo Institute of Technology  
2-12-1 Ookayama, Meguro-ku, Tokyo 152-8550 Japan  
February 15-16, 2018

## –AGENDA–

**Thursday, February 15, 9:00am – 17:30pm (Invitation Only)**  
**West Campus Building 8 East Wing 10F, Large Meeting Room**

TIME	DESCRIPTION	PRESENTER
9:00 AM	<b>Welcome &amp; Opening</b>	Satoshi Matsuoka, Tokyo Tech
9:15 AM	<b>Plenary:</b> Engineering the Transition of Climate Models for Diverging Architectures in Next-generation Supercomputers	Mohammed Wahib, AIST OIL
	<b>Applications</b>	Rio Yokota, Tokyo Tech, Session Chair
10:00 AM	<ul style="list-style-type: none"><li>• Computations of Properties of Atoms and Molecules using Relativistic Coupled Cluster Theory</li></ul>	Bhanu Das, Tokyo Tech
10:30 AM	<b>Break</b>	
11:00 AM	<ul style="list-style-type: none"><li>• Performance Evaluation of Scalable Optoelectronics Application on Large-Scale Knights Landing Cluster</li></ul>	Yuta Hirokawa, University of Tsukuba
11:30 AM	<ul style="list-style-type: none"><li>• Recent Developments of Molecular Dynamics Calculation Software MODYLAS</li></ul>	Yoshimichi Ando, University of Nagoya
12:00 PM	<b>Working Lunch – Federated Testbed Architecture</b>	CSCS, ORNL, Tokyo Tech
	<b>Emerging Technologies - Software Ecosystem</b>	Barney Maccabe, ORNL, Session Chair
14:00 PM	<ul style="list-style-type: none"><li>• The Arm Technology Ecosystem: Current Products and Future Outlook</li></ul>	Dan Ernst, Cray
14:30 PM	<ul style="list-style-type: none"><li>• Survey on Container Technology – Shifter Improvements</li></ul>	Maxime Martinasso, CSCS
15:00 PM	<ul style="list-style-type: none"><li>• Building Software Ecosystems for AI Cloud Using Singularity HPC Container</li></ul>	Hitoshi Sato, AIST
15:30 PM	<ul style="list-style-type: none"><li>• Performance Tools for Task Parallel Programs</li></ul>	An Huynh, The University of Tokyo
16:00 PM	<b>Break</b>	
	<b>Emerging Technologies - Hardware Technologies</b>	Akihiro Nomura, Tokyo Tech, Session Chair
16:30 PM	<ul style="list-style-type: none"><li>• FPGA-based Supercomputing: New Opportunities and Challenges</li></ul>	Naoya Maruyama, RIKEN
17:00 PM	<ul style="list-style-type: none"><li>• In-Network Computing Architecture to Enable Next Generation HPC</li></ul>	Richard Graham, Mellanox
17:30 PM	<ul style="list-style-type: none"><li>• Technology Challenges and Trends Over the Next Decade</li></ul>	Al Gara, Intel
18:00 PM	<b>Adjourn Day 1</b>	
18:10 PM	<b>TSUBAME tour</b>	Satoshi Matsuoka, Tokyo Tech
19:00 PM	<b>Working Dinner at Tokyo Tech</b> Dinner Topic: Working Group Networking	

**Friday, February 16, 9:00am – 17:00pm (Closed Session)**  
**West Campus Building 9 East Wing, 2F, Collaboration Room**

<b>TIME</b>	<b>DESCRIPTION</b>	<b>PRESENTER</b>
9:00 AM	<b>Day 2 Welcome and Logistics - West Campus Building 9 East Wing, 2F</b>	Satoshi Matsuoka, Tokyo Tech
9:05 AM	<b>Update on 2017 Activities</b> <ul style="list-style-type: none"> <li>• Applications</li> <li>• Emerging Technologies</li> <li>• Resource Management</li> </ul>	
10:00 AM	<b>Working Group Charge and Expectations</b>	Satoshi Matsuoka, Tokyo Tech Jeff Nichols, ORNL Thomas Schulthess, CSCS
10:15 AM	<b>Break</b>	
10:30 AM	<b>Breakout Groups #1</b> <ul style="list-style-type: none"> <li>• Applications - West Campus Building 8 East Wing 10F</li> <li>• Emerging Technology - GSIC Building 2F</li> <li>• Resource Management - West Campus Building 9 East Wing, 2F</li> <li>• Governance - GSIC Building First Floor Director's Room</li> </ul>	
12:00 PM	<b>Working Lunch</b>	Working groups continue work
13:00 PM	<b>Breakout Groups #2</b> <ul style="list-style-type: none"> <li>• Applications - West Campus Building 8 East Wing 10F</li> <li>• Emerging Technologies and Resource Management - GSIC Building 2F</li> <li>• Governance- GSIC Building First Floor Director's Room</li> </ul>	
15:00 PM	<b>Break</b>	
15:15 PM	<b>Breakout Groups #3</b> <ul style="list-style-type: none"> <li>• Applications- West Campus Building 8 East Wing 10F</li> <li>• Emerging Technology - GSIC Building 2F</li> <li>• Resource Management - West Campus Building 9 East Wing, 2F</li> <li>• Governance- GSIC Building First Floor Director's Room</li> </ul>	
16:15	<b>Final Report Out from Working Groups - West Campus Building 9 East Wing, 2F</b>	
17:00 PM	<b>Adjourn Day 2</b>	
17:30 PM	<b>Bus leaves from Tokyo Tech to Ryogoku (Hananomai)</b>	
18:30 PM	<b>Working Dinner – Hananomai</b> Dinner Topic: Future plans for HPC at Tokyo Tech, Satoshi Matsuoka, Tokyo Tech	