Biographical Sketch for Jingqing (kimmy) Mu

Oak Ridge National Laboratory **Phone: (865)-574-3464**
Oak Ridge, TN **Fax: (865) 241-4811**
E-mail: muj1@ornl.gov

Education

PhD in Electrical and Computer Engineering, University of Arizona, 2011.

MS in Systems Engineering, Nanjing University of Science and Technology, China, 2007.

Select Professional Experience

2013 – present, Research Scientist, Oak Ridge National Laboratory, Oak Ridge, TN.
2012 – 2013, Post-master, Oak Ridge National Laboratory, Oak Ridge, TN.

Publications 2009-2013

1. R. Tchoua, J. Choi, S. Klasky, Q. Liu, J. Logan, K. Moreland, J. Mu, N. Podhorszki, D. Pugmire, M. Wolf. ADIOS Visualization Schema: A First Step towards Improving Interdisciplinary Collaboration in High Performance Computing. International Conference on eScience, 2013.
2. J. Mu, K. Shanker, R. Lysecky. Profiling and online system-level performance and power estimation for dynamically adaptable embedded systems. ACM Transactions on Embedded Computing Systems (TECS), 2013.
3. J. Mu, R. Lysecky. Adaptive Online Heuristic Performance Estimation and Power Optimization for Reconfigurable Embedded Systems. International Conference on Hardware-Software Codesign and System Synthesis (CODES+ISSS), 2012.
4. J. Mu, R. Lysecky. Profile Assisted Online System-Level Performance and Power Estimation for Dynamic Reconfigurable Embedded Systems. Asia and South Pacific Design Automation Conference (ASP-DAC), Accepted, pp. 737-742, 2011.
5. J. Mu, R. Lysecky. Autonomous Hardware/Software Partitioning and Voltage/Frequency Scaling for Low-Power Embedded Systems. ACM Transactions on Design Automation of Electronic Systems (TODAES), Vol. 15, No. 1, Article 2, pp. 1-20, 2009.

Select Synergistic Activities

General: Extensive experience in large-scale scientific applications, power and performance tradeoff, high performance I/O, code coupling. **OLCF.** My role in the Oak Ridge Leadership Facility is to help applications use better I/O techniques and to accurately use schema for code coupling and visualization. **DOE SciDAC for: Center for Plasma Edge Simulation.** My role was to develop API for visualization schema used by VisIt and have schema in ADIOS, which could get XGC code coupling using ITER data structure. **DOE SciDAC for: Exascale Simulation of Combustion in Turbulence:** My role was to integrate AMR Boxlib code with ADIOS and see the performance and power tradeoff from LMC input.

Recent Collaborators (outside Oak Ridge National laboratory)

Ankit Agrawal (NWU), James Ahrens (LANL), Eric Brugger (LLNL), Peer-Timo Bremer (LLNL), Wes Bethel (LBNL), Hank Childs (LBNL), CS Chang (PPPL), Alok Choudhary (Northwestern U), Berk Geveci (Kitware), Charles Hansen (U Utah), Chris Johnson (U Utah), Kenneth Joy (UC Davis), Robert Latham (ANL), Wei-Keng Liao (NWU), Jeremy Logan (U Tennessee), Roman Lysecky (U Arizona), Kwan-Liu Ma (UC Davis), Kenneth Moreland (SNL), Michael Papka (ANL), Manish Parashar (Rutgers U), Valerio Pascucci (U Utah), Tom Peterka (ANL), Robert Ross (ANL), Nagiza Samatova (NC State), Allen Sanderson (U Utah), William Schroeder (Kitware)