Workshop Introduction, Opening Comments, and Discussion by Dr. Wu-chun Feng
8:15 AM - 8:30 AM

Session 1: Modeling and Provisions
8:30 AM - 10:00 AM
- Runtime Power Monitoring and Management in HPC Systems via Statistical Modeling
  Vignesh Adhinarayanan, Ph.D. Student
- Cognizant Networks: A Model for Session-based Communications and Adaptive
  Vignesh Adhinarayanan, Ph.D. Student
  Ahmed Helal, Ph.D. Student

Break and Discussion
10:00 AM - 10:15 AM

Session 2: Libraries and Frameworks
10:15 AM – 11:45 AM
- Abstraction and Modularity as Solutions to the Programmability/Performance/Portability Problem
  Paul Sathre, Research Staff Member
- Scaling the GPGPU Tower of Babel with CU2CL
  Dr. Mark Gardner
- GLAF: A Visual Programming and Auto-Tuning Framework for Parallel Computing
  Konstantinos Krommydas, Ph.D. Student & ICTAS Fellow

Lunch Break
11:45 AM - 1:00 PM

Session 3: Accelerator-based Computing I
1:00 PM – 2:00 PM
- Efficient Ways to Implement Forward and Reverse MDS
  Sajal Dash, Ph.D. Student
- Automatic Vectorization of Parallel Algorithms on Modern Multi/Manycore Processors
  Kaixi Hou, Ph.D. Student

Break and Discussion
2:00 PM – 2:15 PM

Session 4: Accelerator-based Computing II
2:15 PM – 3:15 PM
- cuArt: Fine-Grained Algebraic Reconstruction Technique for Computed Tomography Images on GPUs
  Xiaodong Yu, Ph.D. Student
- Transforming Irregular Algorithms for Heterogeneous Computing: Case Studies in Bioinformatics
  Jing Zhang, Ph.D. Student

Wrap-Up Discussion and Q&A: Dr. Wu-chun Feng
3:15 PM – 4:00 PM