

4th SEEC Workshop (January, 15, 2016)	Torgersen Hall 3100
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
<ul style="list-style-type: none"> ● <i>Runtime Power Monitoring and Management in HPC Systems via Statistical Modeling</i> Vignesh Adhinarayanan, Ph.D. Student (30 min) ● <i>Cognizant Networks: A Model for Session-based Communications and Adaptive</i> Vignesh Adhinarayanan, Ph.D. Student (30 min) ● <i>Auto-Match: A Tool for Automatic Kernel-Architecture Matching</i> Ahmed Helal, Ph.D. Student (30 min) 	
Break and Discussion	10:00 AM - 10:15 AM
Session 2: Libraries and Frameworks	10:15 AM – 11:45 AM
<ul style="list-style-type: none"> ● <i>Abstraction and Modularity as Solutions to the Programmability/Performance/Portability Problem</i> Paul Sathre, Research Staff Member (30 min) ● <i>Scaling the GPGPU Tower of Babel with CU2CL</i> Dr. Mark Gardner (30 min) ● <i>GLAF: A Visual Programming and Auto-Tuning Framework for Parallel Computing</i> Konstantinos Krommydas, Ph.D. Student & ICTAS Fellow (30 min) 	
Lunch Break	11:45 AM - 1:00 PM
Session 3: Accelerator-based Computing I	1:00 PM – 2:00 PM
<ul style="list-style-type: none"> ● <i>Efficient Ways to Implement Forward and Reverse MDS</i> Sajal Dash, Ph.D. Student (30 min) ● <i>Automatic Vectorization of Parallel Algorithms on Modern Multi/Manycore Processors</i> Kaixi Hou, Ph.D. Student (30 min) 	
Break and Discussion	2:00 PM – 2:15 PM
Session 4: Accelerator-based Computing II	2:15 PM – 3:15 PM
<ul style="list-style-type: none"> ● <i>cuArt: Fine-Grained Algebraic Reconstruction Technique for Computed Tomography Images on GPUs</i> Xiaodong Yu, Ph.D. Student (30 min) ● <i>Transforming Irregular Algorithms for Heterogeneous Computing: Case Studies in Bioinformatics</i> Jing Zhang, Ph.D. Student (30 min) 	
Wrap-Up Discussion and Q&A: Dr. Wu-chun Feng	3:15 PM – 4:00 PM