

1st Workshop of the SEEC Center (August 22, 2014)**Torgersen Hall 1020**

| | |
|--|----------------------------|
| Workshop Introduction by Prof. Wu Feng | 9:00 AM – 9:10 AM |
| Scheduling in Heterogeneous Systems | 9:10 AM – 10:00 AM |
| <ul style="list-style-type: none"> • <i>A Runtime System for High Performance Clusters with Heterogeneous Computing Devices</i> Ashwin Aji, Ph.D. Student (25 min) • <i>Runtime Adaptation for Autonomic Heterogeneous Computing</i> Thomas Scogland, Ph.D. Student (25 min) | |
| Break (and/or Informal Discussion) | 10:00 AM – 10:15 AM |
| Democratizing Parallel Computing | 10:15 AM – 11:15 AM |
| <ul style="list-style-type: none"> • <i>CU2CL: Automated CUDA-to-OpenCL Source-to-Source Translation</i> Paul Sathre, Post-M.S. Research Programmer (15 min) • <i>MetaMorph: A Modular Library of Malleable Accelerator Primitives for Heterogeneous Parallel Computing</i> Paul Sathre, Post-M.S. Research Programmer (15 min) • <i>Data Marshalling Primitives in the MetaMorph Library</i> Kaixi Hou, Ph.D. Student (15 min) • <i>Automation Framework for SIMD Vectorization of Parallel Sorting on Manycore Platforms</i> Kaixi Hou, Ph.D. Student (15 min) | |
| Break (and/or Informal Discussion) | 11:15 AM – 11:30 AM |
| OpenDwarfs on Heterogeneous Computing Platforms | 11:30 AM – 12:15 PM |
| <ul style="list-style-type: none"> • <i>On the Characterization of OpenCL Dwarfs on Fixed and Reconfigurable Platforms</i> Konstantinos Krommydas, Ph.D. Student (25 min) • <i>Characterization of Data Access Methods on Heterogeneous Computing Systems</i> Rubasri Kalidas, M.S. Student (15 min) | |
| Lunch (On Your Own) | 12:15 PM – 1:30PM |
| Big Data + Big Compute, Part I | 1:30 PM – 2:45 PM |
| <ul style="list-style-type: none"> • <i>Building A Metadata-Free, Content-Based, Unstructured Data Search Engine</i> Harold Trease, Senior Research Scientist (25 min) • <i>Computational Tasks in Next-Generation Sequencing</i> Nataliya Timosheveskaya, Postdoc (25 min) • <i>Transforming Irregular Algorithms for Heterogeneous Computing – Case Studies in Bioinformatics</i> Jing Zhang, Ph.D. Student (25 min) | |
| Brief Break (and/or Informal Discussion) | 2:45 – 2:50 PM |
| Big Data + Big Compute, Part II | 2:50 – 3:30 PM |
| <ul style="list-style-type: none"> • <i>Large-Scale Graph Processing on Heterogeneous Systems</i> Hao Wang, Ph.D. Research Associate (25 min) • <i>StreamMR: An OpenCL MapReduce Framework</i> Yilong Jin, Ph.D. Student (15 min) | |
| Break (and/or Informal Discussion) | 3:30 – 3:45 PM |
| Green Computing and Networking | 3:45 – 5:00 PM |
| <ul style="list-style-type: none"> • <i>Runtime Power Modeling and Estimation for Graphics Processing Units</i> Vignesh Adhinarayanan (25 min) • <i>On the Energy Proportionality of Servers</i> Balaji Subramaniam (25 min) • <i>SDN: Not Software Defined Networking but Smarter Dynamic Networking</i> Dr. Mark Gardner, Associate Director at SEEC and Network Manager at the Office of IT (25 min) | |