

Runtime Systems for Extreme Scale Programming Models and Architectures

SC15 Workshop
(Monday, November 16th, 2015, Room: Hilton 400-402)

Workshop Schedule

Please note that the regular papers will have 20 mins and the short papers will have 10 mins for presentation. This includes the time for Q/A.

- **Session 1 (09:00-10:00): Welcome and Keynote**
 - Welcome: 9:00-09:10 Siegfried Benkner, Vivek Sarkar (Workshop co-chairs)
 - Keynote: 9:10-10:00 Tim Mattson (Intel)
- **Coffee Break (10:00-10:30)**
- **Session 2 (10:30-12:00): Scheduling & Memory Management**
 - Analysis of Application Sensitivity to System Performance Variability in a Dynamic Task Based Runtime.
G. Shipman, P. McCormick, K. Pedretti, S. Olivier, K. Ferreira, R. Sankaran, S. Treichler, A. Aiken, M. Bauer
(20 Minutes)
 - SPAWN: An Iterative, Potentials-Based, Dynamic Scheduling and Partitioning Tool.
J. Papin, C. Denoual, L. Colombet, R. Namyst
(20 Minutes)
 - Scalable and Locality-aware Resource Management with Task Assembly Objects.
M. Pericas
(20 Minutes)
 - Efficient Static and Dynamic Memory Management Techniques for Multi-GPU Systems.
M. Grossman, M. Araya-Polo
(20 Minutes)
 - Match-making: A Solution Path for Workstealing at Scale for Irregular Applications.
H. Parikh, V. Deodhar, A. Gavrilovska, S. Pande
(10 Minutes)
- **Lunch Break (12:00-13:30)**

- **Session 3 (13:30-15:00): Extreme Scale Runtime Systems**
 - Developing Uintah's Runtime System For Forthcoming Architectures.
B. Peterson, N. Xiao, J. Holmen, S. Chaganti, A. Pakki, J. Schmidt, D. Sunderland, A. Humphrey, M. Berzins
(20 Minutes)
 - Characterizing Application Execution using the Open Community Runtime.
Z. Budimlic, V. Cave, S. Chatterjee, R. Cledat, V. Sarkar, B. Seshasayee, R. Surendran, N. Vrvilo
(20 Minutes)
 - OCR-Vx – An Alternative Implementation of the Open Community Runtime.
J. Dokulil, M. Sandrieser, S. Benkner
(20 Minutes)
 - Implementing a High-level Tuning Language on the Open Community Runtime: Experience Report.
N. Vrvilo, R. Cledat
(10 Minutes)
 - Improving data reuse in co-located applications with progress-driven scheduling.
K. Chandrasekar, B. Seshasayee, A. Gavrilovska, K. Schwan
(10 Minutes)
 - Efficient and Predictable Group Communication Messaging over Multi-core NoCs.
K. Yagna, O. Patil, F. Mueller
(10 Minutes)
- **Coffee Break (15:00-15:30)**
- **Session 4 (15:30-16:00): Runtime Ecosystem**
 - Exploring the APGAS Programming Model using the LULESH Proxy Application.
J. Milthorpe, D. Grove, B. Herta, O. Tardieu
(10 Minutes)
 - Automatic Code Generation for an Asynchronous Task-based Runtime.
M. Baskaran, B. Meister, T. Henretty, S. Tavarageri, B. Pradelle, A. Konstantinidis, R. Lethin
(10 Minutes)
 - Enabling Runtime/Application Co-Design through Common Concurrency Concepts.
J. Wilke, J. Bennett, R. Clay
(10 Minutes)
- **Session 5 (16:00-17:30): Panel discussions & Wrap-up**
 - Session 2 speakers panel (16:00 - 16:30)
 - Session 3 speakers panel (16:30 - 15:00)
 - Session 4 speakers panel (15:00 - 15:15)
 - **Wrap-up (15:15 - 15:30)**