Schedule : Summer 2015

This is the tentative schedule of Mélange group for the Summer 2015 semester.

WEEK	DATE	TOPIC	PRESENTER
1	05/25/2015	No meeting	
2	06/01/2015	Practice talk • Yun Zou, Sanjay Rajopadhye, Automatic Energy Efficient Parallelization of Uniform Dependence Computations, ICS '15	Yun Zou
3	06/11/2015	1. Derivation of Efficient FSM from Polyhedral Loop Nests. • Tomofumi Yuki, Revisiting Loop Transformations with x10 Clocks, X10 2015	Tomofumi Yuki
4	06/15/2015	• Venmugil Elango, Fabrice Rastello, Louis-Noël Pouchet, J. Ramanujam, P. Sadayappan, On Characterizing the Data Movement Complexity of Computational DAGs for Parallel Execution, SPAA '14	Nirmal Prajapati
5	06/22/2015	• Raghesh Aloor, V. Krishna Nandivada, Unique Worker Model for OpenMP, ICS '15	Guillaume Iooss
6	06/29/2015	• Rahul Sharma, Michael Bauer, Alex Aiken, Verification of Producer-consumer Synchronization in GPU Programs, PLDI 2015	Waruna Ranasinghe
7	07/09/2015	• Holger Stengel, Jan Treibig, Georg Hager, Gerhard Wellein, Quantifying Performance Bottlenecks of Stencil Computations Using the Execution-Cache-Memory Model, ICS '15	Yun Zou
8	07/13/2015	TBA	
9	07/20/2015	TBA	
10	07/27/2015	TBA	
11	08/03/2015	TBA	
12	08/10/2015	TBA	
13	08/17/2015	TBA	

Publications

2015

- Yun Zou, Sanjay Rajopadhye, Automatic Energy Efficient Parallelization of Uniform Dependence Computations, 2015
- Tomofumi Yuki, Revisiting Loop Transformations with x10 Clocks, 2015
- Raghesh Aloor, V. Krishna Nandivada, Unique Worker Model for OpenMP, 2015
- Rahul Sharma, Michael Bauer, Alex Aiken, Verification of Producer-consumer Synchronization in GPU Programs, 2015

- Holger Stengel, Jan Treibig, Georg Hager, Gerhard Wellein, Quantifying Performance Bottlenecks of Stencil Computations Using the Execution-Cache-Memory Model, 2015
- Sanyam Mehta, Pen-Chung Yew, Improving Compiler Scalability: Optimizing Large Programs at Small Price, 2015
- Wei Ding, Xulong Tang, Mahmut Kandemir, Yuanrui Zhang, Emre Kultursay, Optimizing Off-chip Accesses in Multicores, 2015
- Charith Mendis, Jeffrey Bosboom, Kevin Wu, Shoaib Kamil, Jonathan Ragan-Kelley, Sylvain Paris, Qin Zhao, Saman Amarasinghe, Helium: Lifting High-performance Stencil Kernels from Stripped x86 Binaries to Halide DSL Code, 2015
- KC Sivaramakrishnan, Gowtham Kaki, Suresh Jagannathan, Declarative Programming over Eventually Consistent Data Stores, 2015
- Anand Venkat, Mary Hall, Michelle Strout, Loop and Data Transformations for Sparse Matrix Code, 2015
- Ian J. Bertolacci, Catherine Olschanowsky, Ben Harshbarger, Bradford L. Chamberlain, David G. Wonnacott, Michelle Mills Strout, Parameterized Diamond Tiling for Stencil Computations with Chapel Parallel Iterators, 2015
- Bo Wu, Guoyang Chen, Dong Li, Xipeng Shen, Jeffrey Vetter, Enabling and Exploiting Flexible Task Assignment on GPU Through SM-Centric Program Transformations, 2015
- Shaizeen Aga, Abhayendra Singh, Satish Narayanasamy, zFENCE: Data-less Coherence for Efficient Fences, 2015
- Tobias Grosser, Sebastian Pop, Louis-Noel Pouchet, P. Sadayappan, Sebastian Pop, Optimistic Delinearization of Parametrically Sized Arrays, 2015
- Mani Zandifar, Mustafa Abdul Jabbar, Alireza Majidi, David Keyes, Nancy M. Amato, Lawrence Rauchwerger, Composing Algorithmic Skeletons to Express High-Performance Scientific Applications, 2015

2014

- Venmugil Elango, Fabrice Rastello, Louis-Noël Pouchet, J. Ramanujam, P. Sadayappan, On Characterizing the Data Movement Complexity of Computational DAGs for Parallel Execution, 2014

2013

- T. Yuki, A. Morvan, S. Derrien, Derivation of efficient FSM from loop nests, 2013
- Xipeng Shen, Yixun Liu, EddyZ. Zhang, Poornima Bhamidipati, An Infrastructure for Tackling Input-Sensitivity of GPU Program Optimizations, 2013