

# Schedule : Spring 2016

This is the tentative schedule of Mélange group for the Spring 2016 semester.

## Mélange 1

Purpose: Recent research paper study and discussion from the Reading pool

Meet time & Place : Wednesdays 10:00 AM - 11:00 AM @ CSB 305

| WEEK | DATE       | TOPIC                                                                                                                                                                                                                 | PRESENTER               |
|------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 1    | 01/20/2016 | No meeting                                                                                                                                                                                                            |                         |
| 2    | 01/27/2016 | No meeting                                                                                                                                                                                                            |                         |
| 3    | 02/03/2016 | Analyzing and critiquing performance data on Blur-Roberts kernel                                                                                                                                                      | Sanjay Rajopadhye       |
| 4    | 02/10/2016 | No meeting                                                                                                                                                                                                            |                         |
| 5    | 02/17/2016 | •<br>Somashekaracharya G Bhaskaracharya, Uday Bondhugula, Albert Cohen, <a href="#">Automatic Intra-Array Storage Optimization</a> , IISc-CSA-TR-2014-3, Nov 2014 and ACM TOPLAS, Feb 2015                            | Sanjay Rajopadhye       |
| 6    | 02/24/2016 | •<br>Martin Kong, Antoniu Pop, Louis-Noël Pouchet, Govindarajan R, Albert Cohen, Sadayappan P, <a href="#">Compiler/Runtime Framework for Dynamic Dataflow Parallelization of Tiled Programs</a> , ACM TACO, Jan 2015 | Nirmal Prajapati        |
| 7    | 03/02/2016 | •<br>Roshan Dathathri, Ravi Teja Mullapudi, Uday Bondhugula, <a href="#">Compiling Affine Loop Nests for a Dynamic Scheduling Runtime on Shared and Distributed Memory</a> , TOPC 2016                                | Waruna Ranasinghe       |
| 8    | 03/09/2016 | No meeting - NVIDIA Workshop                                                                                                                                                                                          |                         |
| 9    | 03/16/2016 | Spring Break                                                                                                                                                                                                          |                         |
| 10   | 03/23/2016 | No meeting - Snow day                                                                                                                                                                                                 |                         |
| 11   | 03/30/2016 | Talk about recent CGO, PPOPP and CC papers                                                                                                                                                                            | Tomofumi Yuki           |
| 12   | 04/06/2016 | •<br>Gert-Jan Van Der Braak, Henk Corporaal, <a href="#">R-GPU: A Reconfigurable GPU Architecture</a> , ACM TACO, March 2016                                                                                          | Revathy Rajasree        |
| 13   | 04/13/2016 | •<br>Linchuan Chen, Peng Jiang, Gagan Agrawal, <a href="#">Exploiting recent SIMD architectural advances for irregular applications</a> , CGO, 2016                                                                   | Swetha Varadarajan      |
| 14   | 04/20/2016 | TBD                                                                                                                                                                                                                   | Rajbharath Chandramohan |
| 15   | 04/27/2016 | TBD                                                                                                                                                                                                                   | Prerana Ghalsasi        |
| 16   | 05/04/2016 | TBD                                                                                                                                                                                                                   | Yun Zou                 |
| 17   | 05/11/2016 | TBD                                                                                                                                                                                                                   | Guillaume Iooss         |
| 18   | 05/18/2016 | TBD                                                                                                                                                                                                                   | Besan Abu Radwan        |

# Mélange 2

Purpose: People present work in progress to get feedback from other members.

Meet time & Place : Thursdays 11:00 AM - Noon @ CSB 345

| WEEK | DATE       | TOPIC                                                                                                                                                                                                                                            | PRESENTER          |
|------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 1    | 01/21/2016 | No meeting                                                                                                                                                                                                                                       |                    |
| 2    | 01/28/2016 | No meeting                                                                                                                                                                                                                                       |                    |
| 3    | 02/04/2016 | Analyzing and critiquing performance data on Dsyr2k kernel                                                                                                                                                                                       | Swetha Varadarajan |
| 4    | 02/11/2016 | Masters Thesis Proposal                                                                                                                                                                                                                          | Swetha Varadarajan |
| 5    | 02/18/2016 | Masters Thesis Proposal                                                                                                                                                                                                                          | Rutuja Patil       |
| 6    | 02/25/2016 | Discussion continued on<br>•<br>Martin Kong, Antoniu Pop, Louis-Noël Pouchet, Govindarajan R, Albert Cohen, Sadayappan P, <a href="#">Compiler/Runtime Framework for Dynamic Dataflow Parallelization of Tiled Programs</a> , ACM TACO, Jan 2015 | Entire group       |
| 7    | 03/03/2016 | No meeting                                                                                                                                                                                                                                       |                    |
| 8    | 03/10/2016 | No meeting - NVIDIA Workshop                                                                                                                                                                                                                     |                    |
| 9    | 03/17/2016 | Spring Break                                                                                                                                                                                                                                     |                    |
| 10   | 03/24/2016 | Stencil Processing Unit                                                                                                                                                                                                                          | Revathy Rajasree   |
| 11   | 03/31/2016 | No meeting                                                                                                                                                                                                                                       |                    |
| 12   | 04/07/2016 | TBD                                                                                                                                                                                                                                              |                    |
| 13   | 04/14/2016 | TBD                                                                                                                                                                                                                                              |                    |
| 14   | 04/21/2016 | TBD                                                                                                                                                                                                                                              |                    |
| 15   | 04/28/2016 | TBD                                                                                                                                                                                                                                              |                    |
| 16   | 05/05/2016 | TBD                                                                                                                                                                                                                                              |                    |
| 17   | 05/12/2016 | TBD                                                                                                                                                                                                                                              |                    |

## Reading Pool

### Publications

#### 2016

- Roshan Dathathri, Ravi Teja Mullanpudi, Uday Bondhugula, Compiling Affine Loop Nests for a Dynamic Scheduling Runtime on Shared and Distributed Memory, 2016
- Saeed Maleki, Madanlal Musuvathi, Todd Mytkowicz, Low-Rank Methods for Parallelizing Dynamic Programming Algorithms, 2016
- Paraskevas Yiapanis, Gavin Brown, Mikel Lujan, Compiler-Driven Software Speculation for Thread-Level Parallelism, 2016

- Dimitrios Chasapis, Marc Casas, Miquel Moreto, Raul Vidal, eduard Ayguade, Jesus Labarta, Mateo Valero, PARSECS: Evaluating the Impact of Task Parallelism in the PARSEC Benchmark Suite, 2016
- Aravind Sukumaran-Rajam, Philippe Clauss, The Polyhedral Model of Nonlinear Loops, 2016
- Andrew Anderson, Avinash Malik, David Gregg, Automatic Vectorization of Interleaved Data Revisited, 2016
- Gert-Jan Van Der Braak, Henk Corporaal, R-GPU: A Reconfigurable GPU Architecture, 2016
- Linchuan Chen, Peng Jiang, Gagan Agrawal, Exploiting recent SIMD architectural advances for irregular applications, 2016
- Hao Zhou, Jingling Xue, A Compiler Approach for Exploiting Partial SIMD Parallelism, 2016

## 2015

- Somashekaracharya G Bhaskaracharya, Uday Bondhugula, Albert Cohen, Automatic Intra-Array Storage Optimization, 2015
- Martin Kong, Antoniu Pop, Louis-Noël Pouchet, Govindarajan R, Albert Cohen, Sadayappan P, Compiler/Runtime Framework for Dynamic Dataflow Parallelization of Tiled Programs, 2015
- Peter Kling, Peter Pietrzyk, Profitable Scheduling on Multiple Speed-Scalable Processors, 2015
- Torsten Hoefler, James Dinan, Rajeev Thakur, Brian Barrett, Pavan Balaji, William Gropp, Keith Underwood, Remote Memory Access Programming in MPI-3, 2015
- Adam Hammouda, Andrew R. Siegel, Stephen F. Siegel, Noise-Tolerant Explicit Stencil Computations for Nonuniform Process Execution Rates, 2015
- Paul Sack, William Gropp, Collective Algorithms for Multiported Torus Networks, 2015
- Grey Ballard, James Demmel, Nicholas Knight, Avoiding Communication in Successive Band Reduction, 2015
- Aurelien Bouteiller, Thomas Herault, George Bosilca, Peng Du, Jack Dongarra, Algorithm-Based Fault Tolerance for Dense Matrix Factorizations, Multiple Failures and Accuracy, 2015
- Duaue Merrill, Michael Garland, Andrew Grimshaw, High-Performance and Scalable GPU Graph Traversal, 2015

## 2014

- Mahesh Ravishankar, John Eisenlohr, Louis-Noël Pouchet, J. Ramanujam, Atanas Rountev, P. Sadayappan, Automatic Parallelization of a Class of Irregular Loops for Distributed Memory Systems, 2014

## 2013

- Kota Fukumoto, Yuichiro shibata, Kiyoshi Oguri, Performance modeling and optimization of 3-D stencil computation on a stream-based FPGA accelerator, 2013

- Carlos Luque, Miquel Moreto, Franciso J. Cazorla, Mateo Valero, Fair CPU time accounting in CMP+SMT processors, 2013

## 2007

- Kamen Yotov, Tom Roeder, Keshav Pingali, John Gunnels, Fred Gustavson, An experimental comparison of cache-oblivious and cache-conscious programs, 2007

From:  
<https://www.cs.colostate.edu/AlphaZ/wiki/> - **AlphaZ**

Permanent link:  
<https://www.cs.colostate.edu/AlphaZ/wiki/doku.php?id=melange:schedule:spring2016&rev=1459442571>

Last update: **2016/03/31 10:42**

