

RAW 2016

23TH Reconfigurable Architectures Workshop
May 23-24, 2016, Chicago, IL, USA

Welcome



Twenty three years of reconfigurable computing

- RAW started in 1994 at IPDPS, Cancun, Mexico
- Evolved with changing focus in the area
- The community and workshop has grown over the years

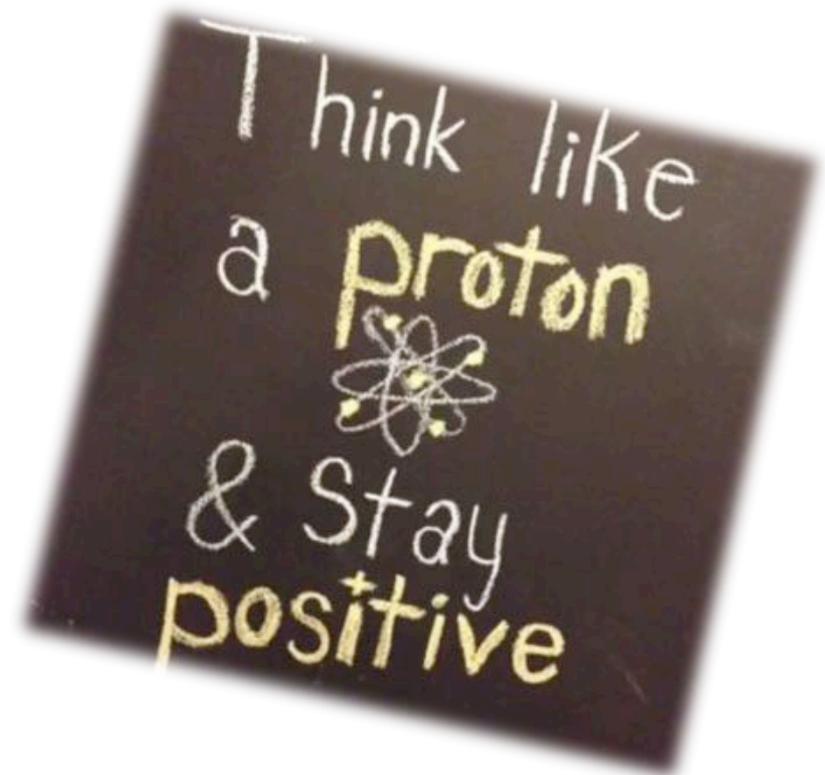
- Today RAW is one of the major meetings in Reconfigurable Computing

Thank you!



Highlights

- Technical sessions and presentations
- 3 Keynote
- 1 Panel
- Interactive sessions
- Social event
- Best paper/demo awards



Organizing Committee

- Workshop Chairs:
 - Marco Santambrogio, Politecnico di Milano, Italy
 - Ramachandran Vaidyanathan, Louisiana State University, USA
- Program Chair:
 - Diana Goehringer, Ruhr-University Bochum, Germany
 - Steve Wilton, University of British Columbia, Canada
- Program Vice-Chairs:
 - Architectures & Algorithms: Seda Memik, Northwestern University, IL, USA
 - Reconfigurable Systems & Applications: Donatella Sciuto, Politecnico di Milano, Italy
 - Software & Tools: Michaela Blott, Xilinx, Dublin, Ireland
- Steering Chair: Viktor K. Prasanna, University of Southern California, USA
- Steering Committee:
 - Jürgen Becker, Karlsruhe Institute of Technology, Germany
 - Viktor K. Prasanna, University of Southern California, USA
 - Ramachandran Vaidyanathan, Louisiana State University, USA
- Publicity Chairs:
 - Brian Veale, IBM, USA
 - Kentaro Sano, Tohoku University, Japan
 - Nikolaos Voros, Technological Institute of Western Greece, Greece



Our Program Chairs



Diana Goehringer

- Ruhr-University Bochum
- Germany



Steve Wilton

University of British Columbia -
Canada -

General Statistics

- Submissions 42 (last year 35)
- Accepted 16 (+11 short)
- Acceptance rate 0.38 full

- **Reviews**
 - Overall #Reviews 161 (at least 3 per paper)
 - External reviewers 30
 - External reviews 36

What we are going to have!

- 5 Technical sessions and presentations
 - Only full and short papers
- 2 short papers intro session
- 3 Keynotes
- Panel discussion
- Interactive sessions
- Talks' presentations available online

RAW 2016



What's hot in RAW 2016

- RAW format
 - Brought it back to the 2-day format

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RAW 2016 Awards

Awards will be announced on
Tuesday at the closing session

- Awards
 - 2 Best Papers
 - 1 Best Poster
 - 1 Best Demo



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- The 1st RAW *social event* on the evening of Monday!

What's hot in RAW 2016



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RAW 2016 Social Event



<http://www.kingstonmines.com/>



<http://raw.necst.it/2016/social-event.php>

RAW 2016 Social Event

- 1st RAW Social event
 - Where: Kingston Mines
 - When: Monday May the 22nd @9pm
- Free food and drink untill 12am
- Entrance with tickets
 - Look for Marco or Diana for the tickets
 - all the seats are sold out



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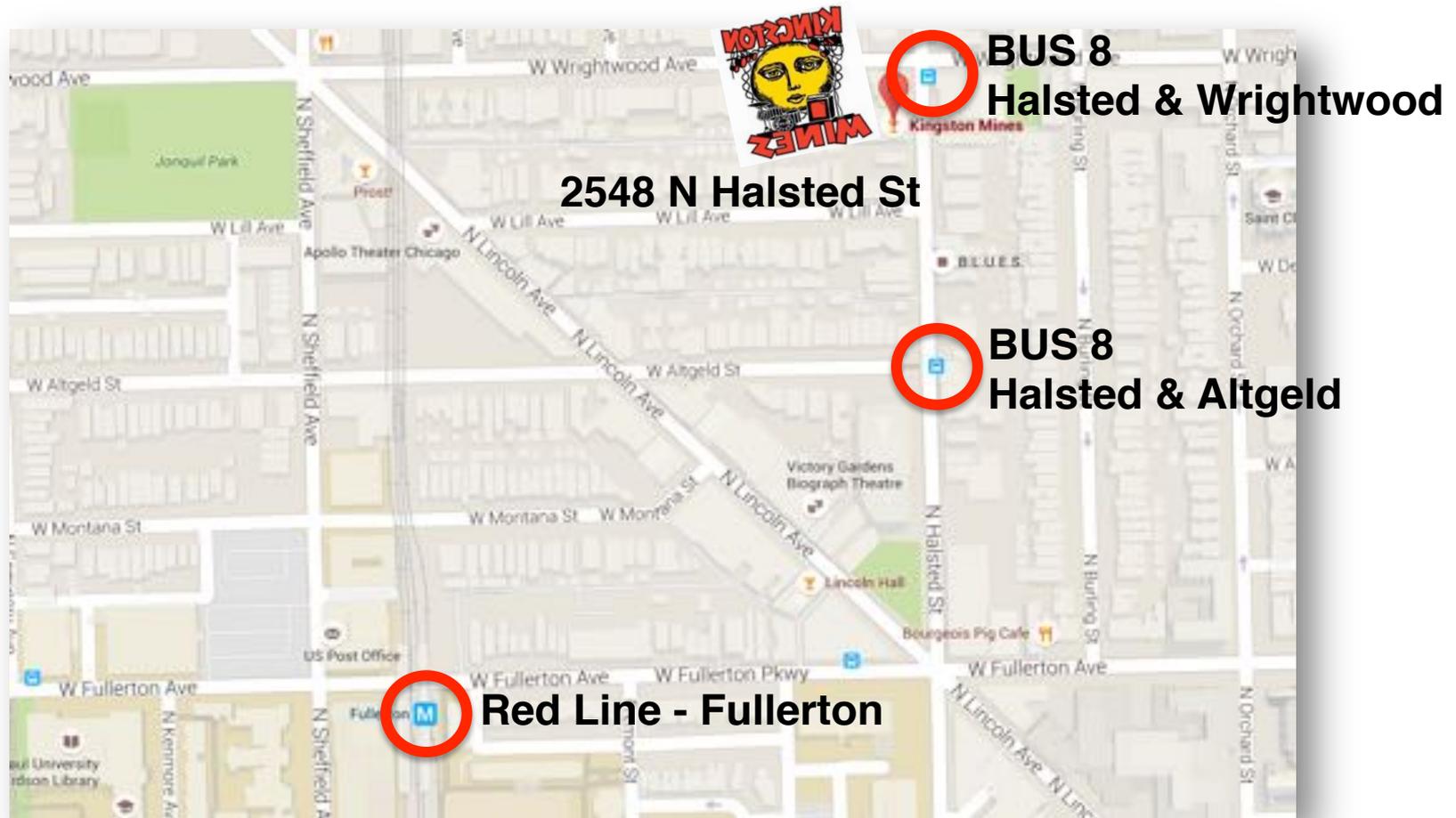
RAW 2016 Social Event

- Kingston Mines
 - @ 2548 North Halsted Street, Chicago
- How to get there
 - BUS 8
 - Stop: Halsted & Wrightwood
 - Stop: Halsted & Altgeld
 - Red Line (L)
 - Stop: Fullerton



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RAW 2016 Social Event



Keynote on Monday @ 8.30am

Reconfigurable Accelerators for Big Data and Cloud



Peter Hofstee

- IBM
- Austin, TX, USA

Keynote on Tuesday @ 10am

Enabling Software Engineers to Program Heterogeneous, Reconfigurable SoC



Patrick Lysaght

- Xilinx
- San Jose, CA, USA

Keynote on Tuesday @ 2.15pm

Why the application development on SoC demands a next level programming model



Dirk van den Heuvel

- TOPIC Embedded Products
- Eindhoven, the Netherlands

Panel on Monday @ 5pm

Reconfigurable Computing Through the Looking Glass

Chair: Marco D. Santambrogio, Politecnico di Milano

Diana Goehring, Ruhr-University Bochum, Germany

Dirk van den Heuvel, TOPIC, Eindhoven, the Netherlands

Peter Hofstee, IBM, Austin, TX, USA

Gokhan Memik, Northwestern University, Chicago, IL, USA

For the speakers...

- Please use your own computer
 - Check in advance that your computer works ok with the projector
 - Contact your session chair in advance to verify that everything is ok
- Poster sessions
 - Brief oral introduction (3-4 slices, 5 mins)
 - A board will be available for each poster
 - Place your poster in advance

Looking Ahead... RAW 2017

RAW 2017

More information tomorrow

Looking Ahead... RAW 2017

Orlando, FL, USA

May, 2017



RAW 2017

What we can share with you today

Thank you!

- Authors and attendees
- Program Committee
- The IPDPS Organizing Committee
- If you have any questions or remarks
 - R. Vaidyanathan vaidy@lsu.edu
 - Juergen Becker becker@kit.edu
 - Marco Santambrogio marco.santambrogio@polimi.it

Follow us on facebook

- We do really want to build the RAW community!
- Keep in touch with you all
- Listen to all you feedbacks, suggestions, ideas to improve the workshop

[https://www.facebook.com/groups/
ReconfigurableArchitecturesWorkshop/](https://www.facebook.com/groups/ReconfigurableArchitecturesWorkshop/)



Follow us on our “new” website!



The screenshot shows the website for the 23rd Reconfigurable Architectures Workshop (RAW 2016). At the top, there are logos for the IEEE Computer Society and IPDPS 2016 Chicago. Below the logos is a navigation menu with items: Advance program, Topics of Interest, Paper Submission, Publication, Important Dates, Organization, Program Committee, and Workshop editions. The main content area features a banner with three images: a city skyline with the Cloud Gate sculpture, a large 'CHICAGO' sign, and a view of a lake. Below the banner, the text reads: '23rd Reconfigurable Architectures Workshop', 'Official website: raw.necst.it', and 'Monday and Tuesday, May 23-24, 2016. Chicago Hyatt Regency, Chicago, Illinois USA'. A paragraph of smaller text follows, describing the workshop's association with the 30th Annual IEEE International Parallel & Distributed Processing Symposium (IEEE IPDPS 2016) and its sponsorship by the IEEE Computer Society and the Technical Committee on Parallel Processing.

<http://raw.necst.it>

Follow us on our “new” website!



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<http://raw.necst.it>

Special thanks to Marco Rabozzi!
The RAW webmaster!!!



more awesome pictures at THEMETAPICTURE.COM

Keynote

Reconfigurable Accelerators for Big Data and Cloud



H. Peter Hofstee

- Ph.D. California Inst. of Technology, 1995
- Distinguished research staff member at the IBM Austin Research Lab, USA
 - He is an IBM master inventor with more than 100 issued patents
 - Member of the IBM Academy of technology.
- Part-time professor in Big Data Systems at Delft University, Netherlands
- He was the chief architect of the Synergistic Processor Elements in the Cell Broadband Engine processor
 - in the Sony Playstation3
 - In the first supercomputer to reach sustained Petaflop operation. After returning to IBM H
- He focused on optimizing the system roadmap for big data, analytics, and cloud, including the use of accelerated compute.
 - work on coherently attached reconfigurable acceleration on Power 7 paved the way for the new coherent attach processor interface on POWER 8