ASPLOS 2014

Welcome!
Goals

Move the field forward

Continue as a broad, multidisciplinary conference

Continue to raise the bar for quality in review process
• 49 accepted papers
  – 217 submissions, 12% increase from last year, new record!
  – 5 more accepted papers, same acceptance rate (coincidence)

• Topics
  – Data centers
  – Approximate computing
  – Security
  – Resource management
  – Software reliability
  – Heterogeneous computing
  – Virtualization
  – Transactional memory
  – Storage systems
  – Parallelism
  – …

**All papers dual track**

**BUT …**
Mitigating Dual Track Impact

• **Lightning sessions**
  – 90s trailer for each paper

• **Posters for closer interaction (Tuesday@4:30)**

Chair: John Regehr
Keynotes Today and Tomorrow

Monday

Brad Calder, Microsoft

Inside Windows Azure: The Challenges and Opportunities of a Cloud Operating System

Tuesday

Jeff Gehlhaar, Qualcomm

Neuromorphic Processing: A New Frontier in Scaling Computer Architecture
Wild and Crazy Ideas (WACI) and WACInote

Josh Smith, Univ of Washington
RF-powered computing and communication

Tuesday@5:30

+ Seven WACI papers

Chairs: Luis Ceze, Karin Strauss
Other Tuesday Events

• Awards lunch
  – Best paper of ASPLOS 2014
  – Influential paper from an ASPLOS ten or more years ago

• Business meeting
  – Program chair’s report
  – General chair’s report
  – Next ASPLOS
  – Your feedback

Steering committee chair: Tim Harris

• Posters, WACI, Business meeting with drinks and food!
Wednesday Debate

Resolved: **Specialized** architectures, languages, and system software should largely supplant **general-purpose** alternatives within the next decade

Moderator: David Wood
Wednesday Debate

Pro Team

Chris Kozyrakis
Kunle Olukotun
Ed Bougnion

Con Team

Chris Hughes
Keshav Pingali
Emmett Witchel

YEA!
NEA!
Some Announcements

• **CACM Research Highlights (RH) Nominations**
  
  – ASPLOS 2014 will forward a few papers for consideration for RH
    
    * Forward-looking, thought provoking
    * Interest to broad audience
    * May be imperfect, but create excitement and spirited discussions
  
  – Your input is needed!
  
  – Vote for 1 to 4 papers at https://www.surveymonkey.com/s/S886BMK

• **Women**
  
  – Lunch tables today with program chairs of ASPLOS’14, 15, HPCA’14
THANKS!
Program Committee

Sarita Adve  Mary Jane Irwin  Vijay Pai
David F. Bacon  Ravi Iyer  Keshav Pingali
Emery Berger  Martha Kim  Partha Ranganathan
Francois Bodin  Eddie Kohler  Karin Strauss
Calin Cascaval  John Kubicatowicz  Martin Vechev
Luis Ceze  David Lie  Carl Waldspurger
Brad Chen  Shan Lu  Tom Wenisch
Trishul Chilimbi  Debbie Marr  Emmett Witchel
Sandhya Dwarkadas  Margaret Martonoski  Lin Zhong
Krisztian Flautner  Kathryn S. McKinley  Yuanyuan Zhou
Tim Harris  Santosh Nagaradakatte  Willy Zwaenepoel
Mark Hill  Satish Narayanasamy
External Review Committee

Ole Agesen
Anastassia Ailamaki
Krste Asanovic
Tom Ball
Luiz Barroso
Rajeev Barua
Ricardo Bianchini
Rob Bocchino
Hans Boehm
Greg Bronevetsky
David Brooks
Angela Demke Brown
Mihai Budiu
Stephen Chong
Albert Cohen
Srini Devadas
Dave Dice
Chen Ding
Mattan Erez
Babak Falsafi
Stephen Freund
Xin Fu
Maria J. Garzaran
Ada Gavrilovska
Robert Geva
Ashvin Goel
Steven Gribble
Dan Grossman
Gernot Heiser
Tony Hosking
Wilson Hsieh
Chris Hughes
Hillery Hunter
Rebecca Isaacs
Mahmut Kandemir
Orran Krieger
Rakesh Kumar
E. Christopher Lewis
Kai Li
Geoff Lowney
Evangelos Markatos
Milo Martin
Jonathan McCune
Maged M. Michael
Todd Millstein
Tipp Moseley
Onur Mutlu
Andrew Myers
Edmund Nightingale
Li-Shiuan Peh
Miilos Prvulovic
Feng Qin
Ravi Rajwar
Pradeep Ramachandran
Lawrence Rauchwerger
Mendel Rosenblum
Karu Sankaralingam
Simha Sethumadhavan
Mark Silberstein
Anand Sivasubramanian
Edward Suh
Steve Swanson
Josep Torrellas
Eric Tune
Amit Vasudevan
Kaushik Veeraraghavan
TN Vijaykumar
Adam Welc
Xiaolan Zhang
My Two Right Hands

Hyojin Sung  Rakesh Komuravelli

Submission chairs
The Wizards

Rajeev Balasubramonian

Al Davis