

Welcome to Hot Chips 31!

Organizing Committee

John D. Davis

(Barcelona Supercomputing Center)

General Chair

Conference Sponsor: IEEE Technical Committee on Microprocessors and Microcomputers

Conference Details & Stats

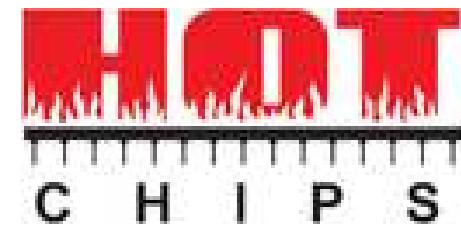
- WELCOME BACK TO STANFORD!!!
- Registration
 - Record numbers!!!
- Sponsorship
 - Intel sponsoring the conference food
 - 6 Platinum or better
 - 7 Gold
 - 10 Silver



Western Digital.

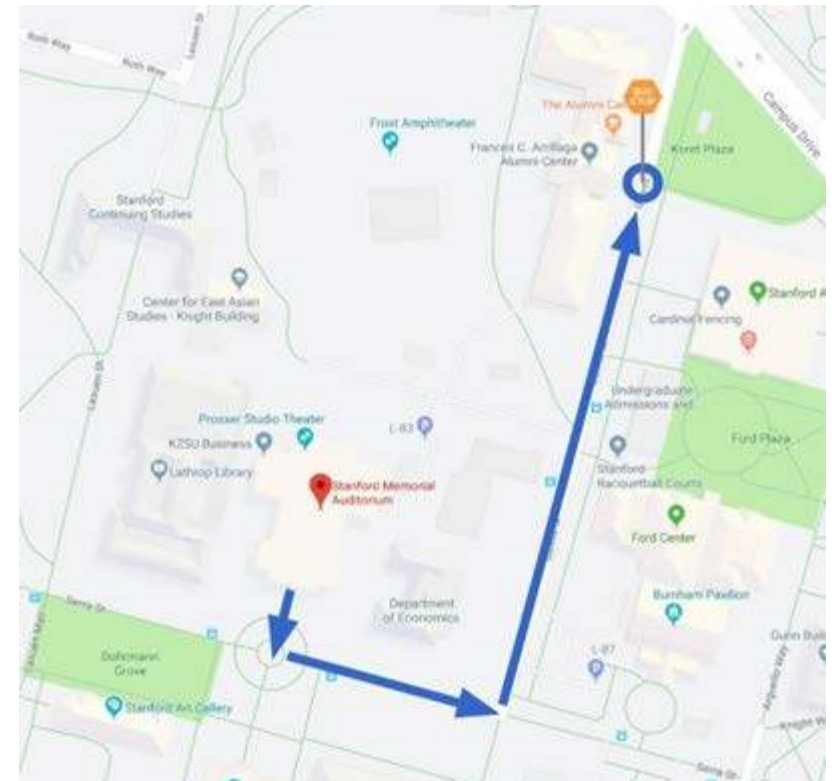
Google





Intel's Hot Wings @ Hot Chips

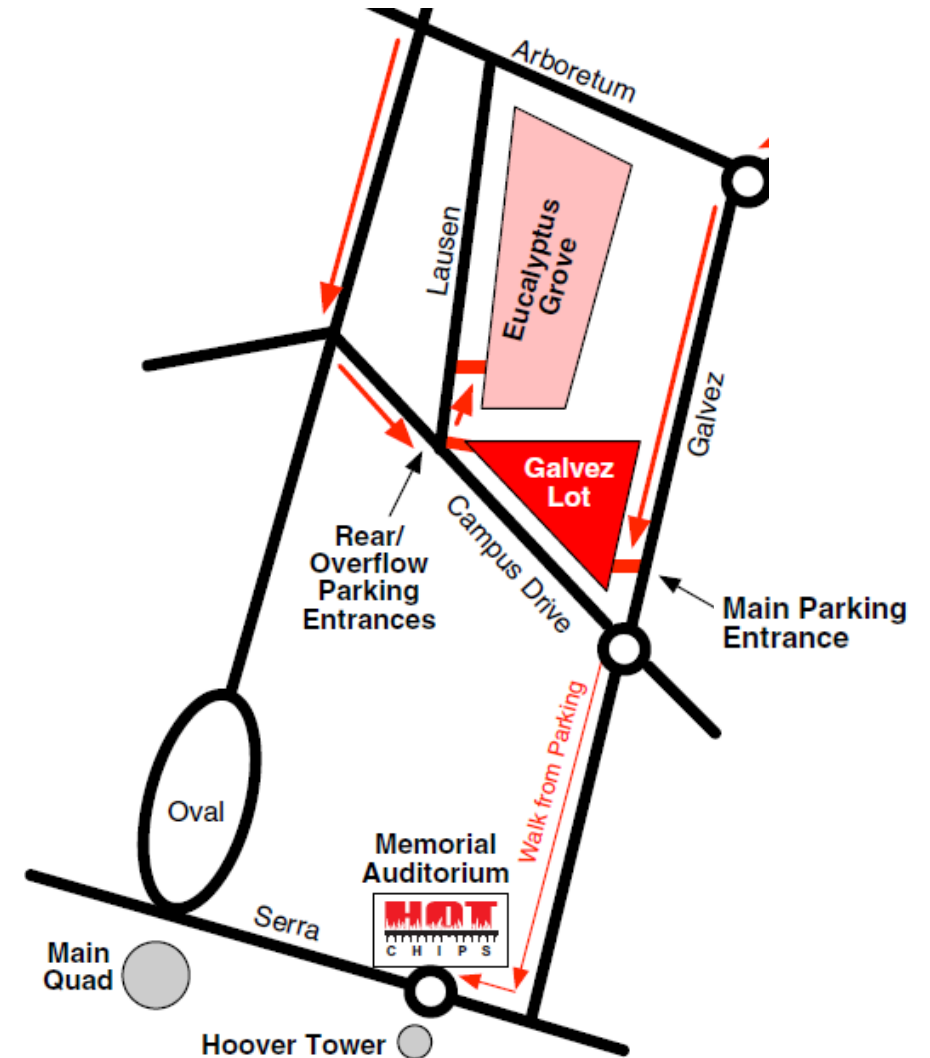
- Free shuttle buses from 7:30 to 8 pm @ the Alumni Center





Parking

- Must use the parking pass
 - Only good in Galvez or Eucalyptus lots
- Don't have a pass?
 - We have spare passes in the lobby





Food Details

- Breakfast & Breaks in the Courtyard.
- Lunch served in Dohrmann Grove
- Overflow seating in East Oval Grove
- Hot Chips Reception in Dohrmann Grove





Presentations Available....

- Day of the presentations
 - <http://www.hotchips.org/attendees-program/>
 - Password: cloudyrisc
 - Videos will be available in a couple of weeks
 - WiFi instructions printed on the back of your badge and the walls



Behind the scenes

- Volunteer-run conference
 - Steering Committee
 - Organizing Committee
 - Program Committee
 - Volunteers

- Lost and Found is at the Registration Desk



Hot Chips Then and Now



Location History

- HC1: Stanford: Kresge Auditorium → Demolished 2009
- HC10-23, 25: Stanford: Memorial Auditorium
- HC30: De Anza College : Flint Center for the Performing Arts
 - HC24, HC26-30, RIP Flint....
- **HC31: Stanford: Memorial Auditorium**
 - **Please excuse the dust...**

Sessions Then and Now

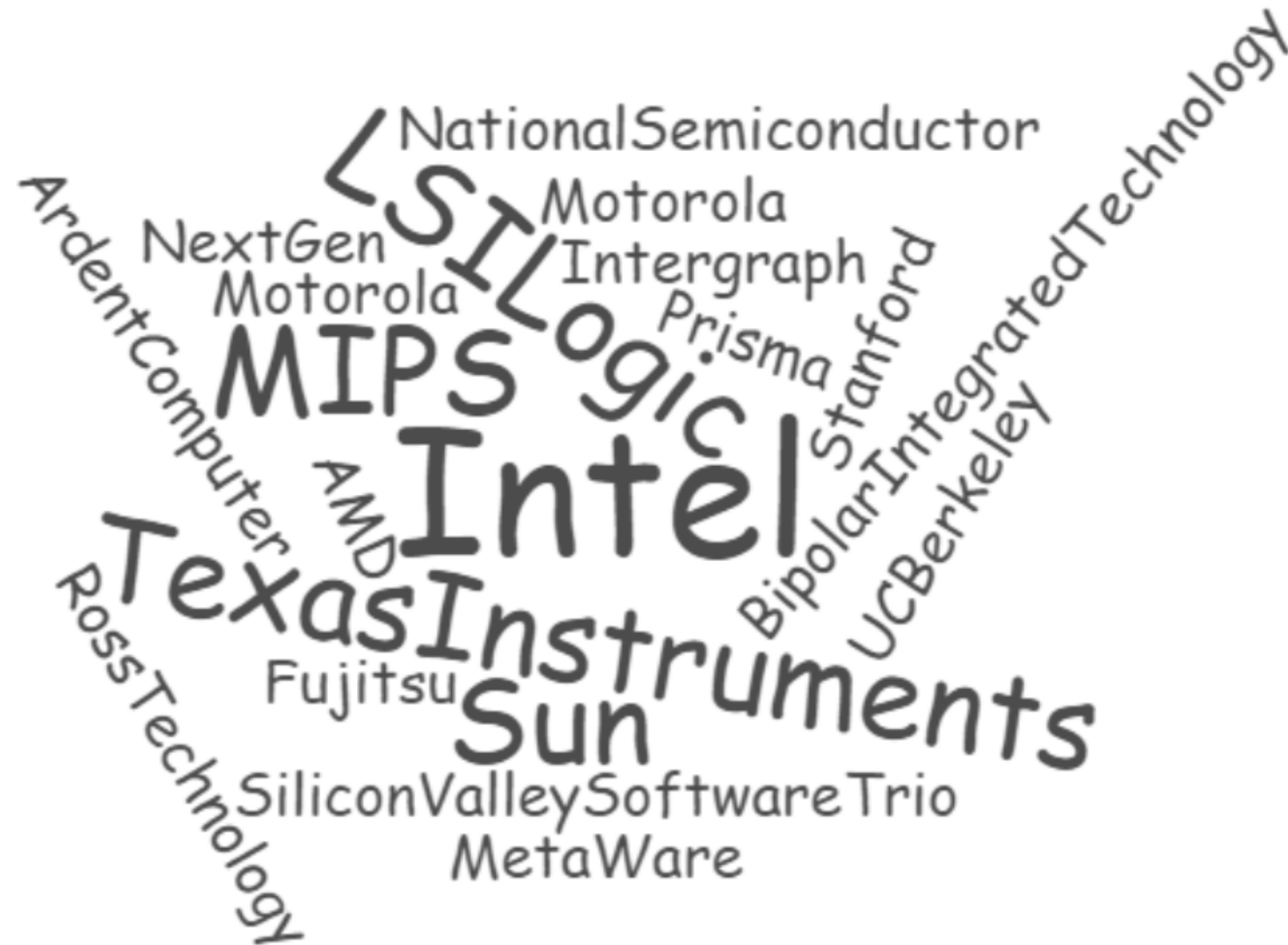
- HC1

- New SPARC CPUs
- RISC CPU Updates
- New Processor Architecture
- Floating Point Processors
- New CISC CPUs
- Embedded CPUs
- Graphics Coprocessors

- HC31

- General Purpose Compute
- Memory
- Methodology and ML Systems
- ML Training
- Embedded and Auto
- ML Inference
- Interconnects
- Packaging and Security
- Graphics and AR

HC 1 Speaker Affiliation



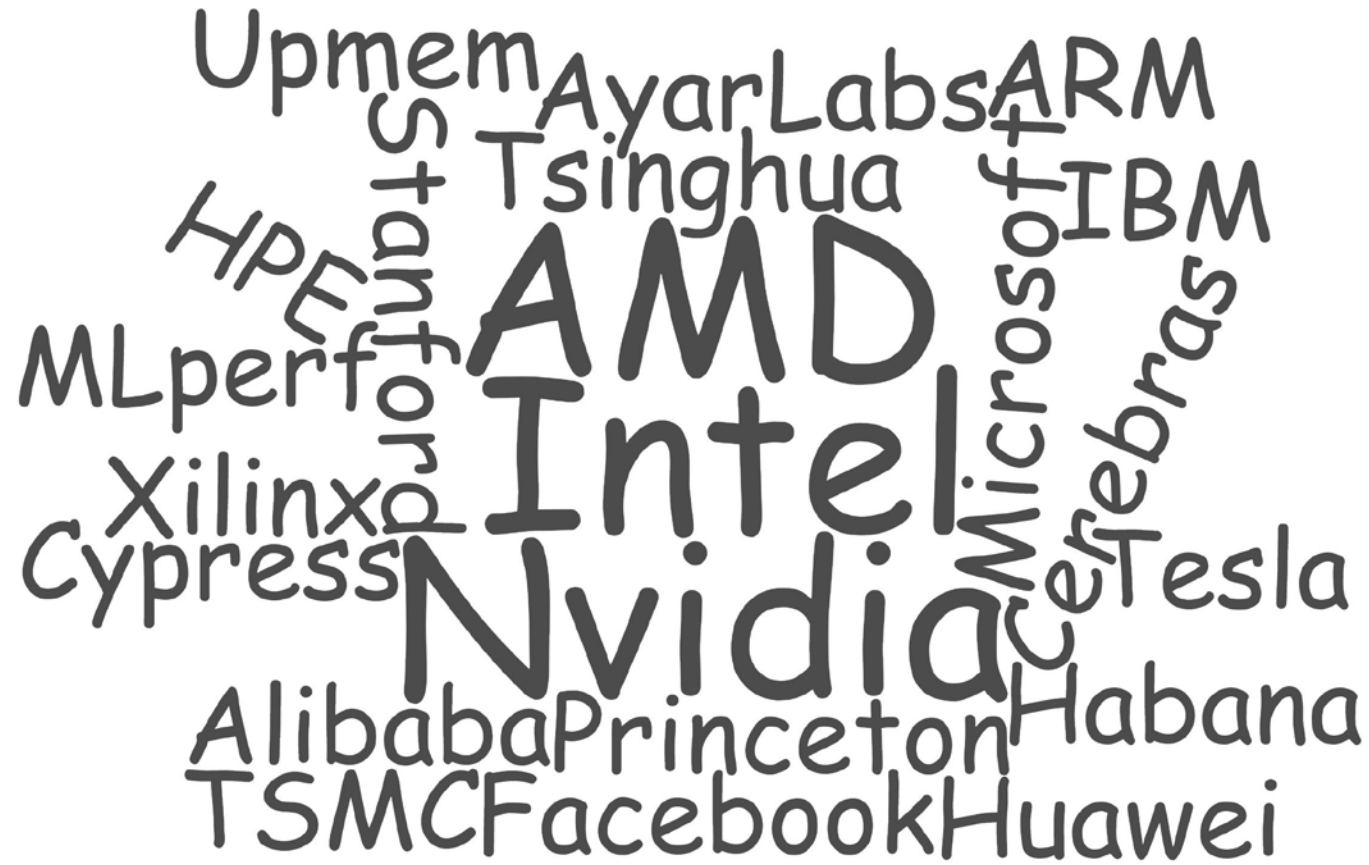
HC 10 Speaker Affiliation

E-muSystems
Motorola
StellarSemiconductor
PhilipsResearchLabs
SGI **IBM** Cyrix
AMD **Intel** Trimedia
3Dlabs **Mitsubishi** Compaq
Hi/fn **Sun** NTT
SandCraft

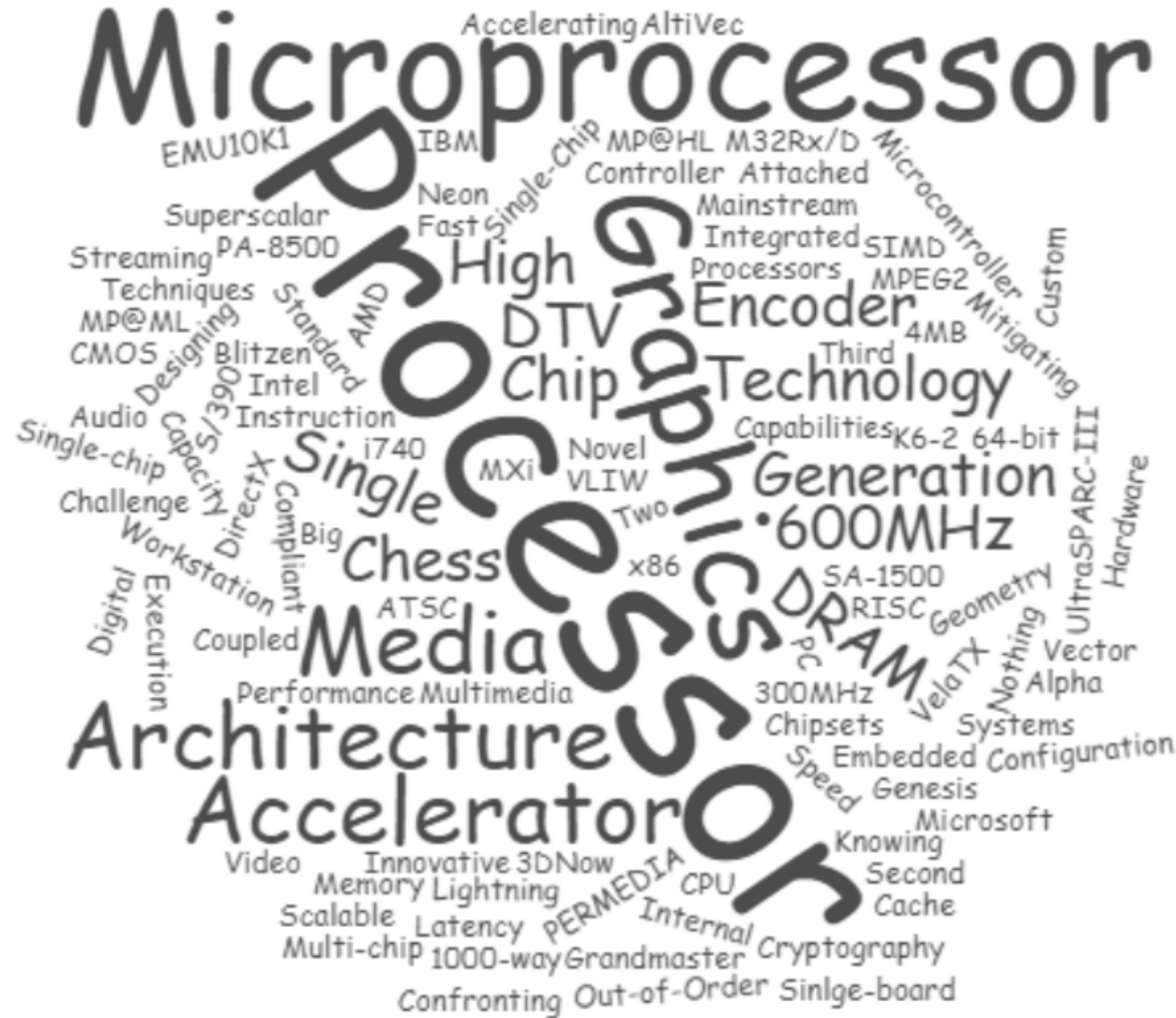
HC 20 Speaker Affiliation



HC 31 Speaker Affiliation

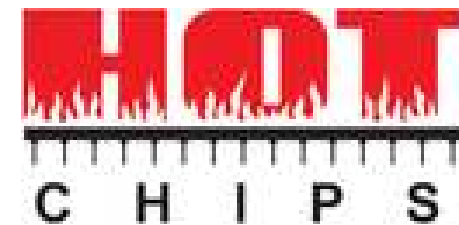


HC 10 Presentations



HC 20 Presentations





Welcome to the Hot Chips 31 Program

Ian Bratt (ARM)

Christos Kozyrakis (Stanford, Google)



Hot Chips 31 Program Committee

Forest Baskett, NEA

Ian Bratt, ARM

Nafea B'shara, AWS

Pradeep Dubey, Intel

John Hennessy, Stanford/Google

Christos Kozyrakis, Stanford/Google

Yoshio Masubuchi, Toshiba

Priyanka Raina, Stanford

John Sell, Microsoft

Frans Sijstermans, NVIDIA

Alan Smith, UC Berkeley

Jan Willem van de Waerdt, Cypress

Fred Weber

Ralph Wittig, Xilinx

Yuan Xie, UCSB/Alibaba

Clifford Young, Google

Program Statistics

88 abstract submissions → 26 talks

ML chips, new CPUs/GPUs/FPGAs

Memory systems, interconnects & packaging, design

Embedded & auto, security

17 poster submissions → 11 posters

See during the conference breaks

Tutorials

- Acceleration in the cloud
 - Nitro project – AWS
 - Acceleration @ Microsoft
 - Cloud TPU v3 – Google
- RISC-V
 - RISC-V overview – UC Berkeley
 - Ecosystem -- SiFive
 - Open source cores -- UC Berkeley, ETHZ

Keynotes



Dr Lisa Su, CEO, AMD

Delivering the Future of High-Performance Computing with System, Software and Silicon Co-Optimization

Monday 1.45pm



Dr Philip Wong, VP Research, TSMC

What Will the Next Node Offer Us?

Tuesday 1.45pm



Proceedings

Available online during the conference

<http://www.hotchips.org/attendees-program>

Password: cloudyrisc

Videos will be available a few weeks later

HotChips archives available online!

Enjoy Hot Chips!

