# Welcome to Hot Chips 2023 Program

Natalia Vassilieva (Cerebras)

Heiner Litz (UC Santa Cruz)

# Hot Chips 2023 Program Committee

Ralph Wittig, Xilinx/AMD

Pradeep K Dubey, Intel

Priyanka Raina, Stanford

Jae W. Lee, SNU

Forest Baskett, Nea

Mark D. Hill, Microsoft

Alan Smith, UC Berkeley

Ashkan Seyedi, Nvidia

Lingjie Xu

Debjit Das Sarma, Tesla

Yasuo Ishii, Tenstorrent

Tom St. John, OctoML

Grant Ayers, Google

Dave Ditzel, Esperanto



## **Tutorials**

#### ML Inference

- Overview, Micah Villmow, NVIDIA
- Quantization Methods for Efficient ML Inference, Amir Gholami, UC Berkeley
- ML Inference at the Edge, Felix Baum, Qualcomm
- PyTorch 2.0, Elias Ellison, Meta
- Hardware Requirements for Exploiting Sparsity in ML Inference, Zhibin Xiao, Moffett AI

#### Chiplets/UCI

- Overview, Debendra Das Sharma, Intel & Nathan Kalyansundharam, AMD
- UCIe Protocol, Swadesh Choudhary, Intel & Marvin Denman, NVIDIA
- Electrical, Form Factor and Compliance, Anwar Kashem, AMD & Gerald Pasdast, Intel
- Software, Manageability & Security, Jérôme Glisse, Google & Sridhar Muthrasanallur, Intel



# Keynotes







Exciting Directions for ML Models and the Implications for Computing Hardware

Hardware for Deep Learning

Jeff Dean, Google, Chief Scientist Amin Vahdat, Google, Fellow & VP Bill Dally, NVIDIA, Chief Scientist

Monday, 9:00 am

Tuesday, 9:00 am



# **Program Statistics and Sessions**

- 90 Submissions
- 24 Accepted oral presentations (8 Sessions)
- Best submissions will be invited to IEEE MICRO
- 10 Accepted posters

## Monday

- Processing in Memory
- CPU 1
- Platforms
- CPU 2

## Tuesday

- ML-Training
- Interconnects
- ML-Inference
- FPGA & Cooling



#### **Posters**

- Selected 10 Outstanding Posters
- Poster Chair: Priyanka Raina
- Posters located at coffee break area
- Posters will be up for the entire conference
- Poster Lightning talks at 8:30 Tuesday (before Keynote)



7:45am -	Sunday, August 26	Monday, August 27	Tuesday, August 28
7:45am =	Registration & Breakfast	Registration & Breakfast	Registration & Breakfast
10:00am	8:30am - 10:30am Tutorial 1: ML Inference	8:45am: Opening Remarks 9:00am: Keynote 1 Jeff Dean & Amin Vahdat, Google 10:00am -11:00am	8:30am: Poster Lightning Talks 9:00am: Keynote 2 Bill Dally, NVIDIA 10:00am -11:00am
Γ	Coffee break & Posters	Processing in Memory	ML Training
12:00pm	11:00am - 12:15pm Tutorial 1: ML Inference	Sachs Memorial & Coffee break  11:30am - 1:00pm	Coffee break & Posters  11:30am - 1:00pm
2:00pm 4:00pm	Lunch	CPU 1	Interconnects  Lunch
	1:30pm - 3:30pm Tutorial 2: Chiplets/UCI	2:15pm - 4:15pm Platforms	2:15pm - 4:15pm ML Inference
	Coffee break & Posters	Piatiorms	WIL Interence
113.1	4:00pm - 5:30pm	Coffee break & Posters	Coffee break & Posters
6:00pm	Tutorial 2: Chiplets/UCI	4:45pm - 6:15pm <b>CPU 2</b>	4:45pm - 6:15pm FPGAs & Cooling
	Reception	Reception	Closing Remarks
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