Vail Computer Elements Workshop

VCEW Preliminary Program 2025

All Times Mountain Daylight Time (UTC-6)

Sunday, June 8th

4:00 pm **Check-in Time** for the Lodge at Vail
5:00 pm Gather **in the Lodge lobby** and walk to the **Reception**
6:30 pm **Dinner**:
8:15 pm **Keynote George Ka'iliwai III** *Enhancing Our National Security Through Computer Hardware and Software*, National Security Fellow for the MITRE Corporation

Monday, June 9th

7:30 am **Continental Breakfast**
8:30 am **Welcome**

Session 1: Compute : Eric Fetzer

8:45 am *Opportunities for Hardware Tailoring in an era of AI Dominance* Galen Shipman, Los Alamos National Labs
9:30 am *Challenges in Hyperscale Server Serviceability* Rob Chappell, Microsoft
10:15 am **Break**
10:30 am *System Scale Architecture for next gen Datacenter and AI* Wilfred Gomes, Mueon
11:15 am *Efficient Programming on Heterogeneous Accelerators* Peipei Zhou, Brown University
12:00 pm **Lunch**

Session 2: AI: Tom St John, Ryan Tabrah

1:00 pm *A Cross-Stack Approach to Realizing Energy Efficient and Sutainable AI* Udit Gupta, Cornell University
1:45 pm *ScalarLM: RL and Post-Training on AMD MI300X* Greg Diamos, TensorWave
2:30 pm **Break**
2:45 pm *DGX Cloud and the Art of AI Acceleration* Michael Gschwind, NVIDIA
3:30 pm *AI Deployment Challenges* Femi Oluwafemi, Intel

5:00 pm **Reception**
6:30 pm **Dinner: La Nonna**

Session 3: Interactive AI Session: Ryan Tabrah

8:15 pm *Blind Spots: What Experts Miss and AI Finds*
A live exploration of where domain intuition fails—and machine insight thrives. Ryan Tabrah, Skillsforge AI

Tuesday, June 10th

7:30 am **Continental Breakfast**

Session 4: Power, Performance and Sustainability: Rajshree Chabulswar, William Wang & Memory: Thomas Vogelsang

8:45 am *Power grids and computing* Bri-Matthias Hodge, CU Boulder / NIST
9:30 am *EU Energy Regulations/Lot3 GTD* Stephen Eastman, Intel
10:15 am **Break**
10:30 am *Google performance and PMU talk* Stephane Eranian, Google
11:15 am *Compute Near Storage* Qing Zheng, Los Alamos National Labs
12:00 pm **Lunch**
1:00 pm **Free Time to enjoy Vail**
4:00 pm **Planning Session for VCEW 2026**
5:00 pm **Reception**
6:30 pm **Dinner: Lancelot**

Session 5: Communications, Networking and Photonics: Victor Aguero

8:15 pm *Photonics and Quantum Science at SRI International* Shon Cook, SRI International

Wednesday, June 11th

7:30 am **Continental Breakfast**

Session 6: Memory: Thomas Vogelsang & Communications, Networking and Photonics: Jack Harwood and Victor Aguero

8:45 am *Memory system with CXL/PNM (processing-near memory)* Hokyoon Lee, Samsung
9:30 am *Memristor Accelerators* Ben Feinberg, Sandia National Labs
10:15 am **Break**
10:30 am *Tightly-integrated and Flexible Systems to Address HPC and AI Communication Challenges* Samantika Sury, HPE
11:15 am *Scaling Up with Low Latency Ethernet* Jai Kumar, Broadcom
12:00 pm **Awards and Final Thoughts**:

VCEW 2025 Program Committee

Chairs:Don Soltis, Intel and Dave Baker, Akeana

Session Chairs

Processors: Eric Fetzer, Intel

Memory: Thomas Vogelsang, Rambus

Consumer Electronics: Atsushi Hasegawa and Ichiro Naka, University of Tokyo

AI: Tom St John, Decompute and Ryan Tabrah, Skillsforge AI

Power, Performance and Sustainability: Rajshree Chabukswar, Intel and William Wang, Bytedance

Communications, Networking and Photonics: Jack Harwood, Dell and Victor Aguero, Cambrian Works

Software: Joe Izraelevitz, University of Colorado at Boulder

The Vail Computer Elements Workshop is sponsored by VCEW in cooperation with Usenix