



# Virtual VCEW 2020 Program

June 20-23, 2020

Program Chair: Don Soltis, Intel  
Program Co-Chair: Steve Miller, Intel

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## Monday June 22

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8:30 pm      **Keynote: Whitfield Diffie:** The Lessons of 20th Century Cryptography Processors

Bailey Whitfield 'Whit' Diffie is an American cryptographer and one of the pioneers of public-key cryptography along with Martin Hellman and Ralph Merkle. Diffie and Hellman's 1976 paper New Directions in Cryptography introduced a radically new method of distributing cryptographic keys, that helped solve key distribution—a fundamental problem in cryptography.

### Processors – Chair: Edmund Gieske, IBM

9:00 am      IBM Z15 – **Christian Jacobi**, IBM  
10:00 am      Samsung M5/6 – **Brian Grayson**, formerly Samsung  
11:00 am      Breakout rooms for networking  
12:00 pm      Break

### Security – Chair: John Kelsey, NIST

1:00 pm      RISC V security architecture – **Helena Handschuh**, Cryptography Research  
2:00 pm      The NIST lightweight crypto competition – **Kerry McKay**, NIST

### Consumer Electronics – Chair: Yoshio Masubuchi

3:00 pm      Accelerating neuroscience data processing with high-speed storage – **Yosuke Brando**, Kioxia

Tuesday June 23

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**IO Interconnect – Chair: Yahya Sotoudeh, Intel**

- 8:00 am TeraPHY: High density Electronic-Photonic Chiplet for optical I/O from a Multichip module – **Mark Wade**, Ayar Labs
- 9:00 am CCIX Cache Coherent Interconnect for Emerging acceleration application – **Mittal**, Xilinx
- 10:00 am OpenCAPI 4.0 – **Jeff Stuecheli**, IBM
- 11:00 am Breakout rooms for networking
- 12:00 pm Break

**Software – Chair: Brian Hirano, Bigstream**

- 1:00 pm TVM: An Automated End-to-End Optimizing Compiler for Deep Learning – **Tianqi Chen**, CTO of OctoML
- 2:00 pm ML Benchmarking – **Gennady Pekhimenko**, University of Toronto

**Memory – Chair: Michael Allen, ARM**

- 3:00 pm Hybrid Memory – **Damir Jamsek**, IBM

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VCEW 2020 Best Talk Award  
Congratulations Mark Wade!

# VCEW 2020 Photo

