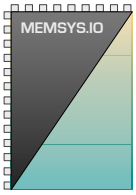

MEMSYS 2018

The International Symposium on Memory Systems

Mon Oct 1	***Welcome Reception***	*5:00 – 9:00 pm*

Tue Oct 2	***Breakfast***	*8:00 am*
8:50 am	***Opening Remarks***	
9:00 am	***Software Keynote:*** *Brian Barrett* *Principal Engineer* *Amazon Web Services, Amazon.com*	
10:00 am	***Break***	
10:20 am	***Session 1:*** *Datacenters and Large Memories*	*p.1*

Session Chair: Matthias Jung, Fraunhofer IESE

3:40 pm	Opportunistic Compression for Direct-Mapped DRAM Caches *Alaa Alameldeen (Intel), Rajat Agarwal (Intel)*	p.129
4:00 pm	Tackling Memory Access Latency Through DRAM Row Management *Sriseshan Srikanth (Georgia Institute of Technology), Lavanya Subramanian (Intel Labs), Sreenivas Subramoney (Intel Labs), Thomas Conte (Georgia Institute of Technology), Hong Wang (Intel Labs)*	p.137
4:20 pm	Efficient Coding Scheme for DDR4 Memory Subsystems *Kira Kraft (Technische Universität Kaiserslautern), Deepak M. Mathew (Technische Universität Kaiserslautern), Chirag Sudarshan (Technische Universität Kaiserslautern), Matthias Jung (Fraunhofer), Christian Weis (Technische Universität Kaiserslautern), Norbert Wehn (Technische Universität Kaiserslautern), Florian Longnos (Huawei Technologies Co. Ltd, Data Center Technologies Lab)*	p.148
4:40 pm	***Break***	
5:00 – 7:00 pm	***Spirited Discussion***	

Memory Systems Problems and Solutions

- Keren Bergman, Columbia University
- Phil Emma, Systems Technology & Architecture Consulting
- Adolfy Hoisie, Brookhaven National Lab
- Rob Ross, Argonne National Lab
- Jeffrey Vetter, Georgia Tech & Oak Ridge National Lab
- Ke Zhang, Institute of Computing Technology, Chinese Academy of Sciences

7:30 pm ***Dinner*** *— Regular attendees on your own*
Program Committee dinner meeting — McCormick & Schmick's Harborside

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Wed Oct 3 ***Breakfast*** *8:00 am*

9:00 am	***Hardware Keynote:*** *Steve Wallach* *Founder of Convey, purchased by Micron, now Director of Design-Engineering Micron*	
10:00 am	***Break***	
10:20 am	***Session 4:*** *Memory for Parallel Systems & Architectures II*	*p.159*

Session Chair: Kurt Keville, MIT

10:20 am	Linking Parallel Algorithmic Thinking to Many-Core Memory Systems and Speedups for Boosted Decision Trees *James Edwards (University of Maryland), Uzi Vishkin (University of Maryland)*	p.161
10:40 am	Profile-Guided Scope-Based Data Allocation Method *Hugo Brunie (CEA/DAM Ile de France), Julien Jaeger (CEA/DAM Ile de France), Patrick Carribault (CEA/DAM Ile de France), Denis Barthou (Bordeaux INP)*	p.169

Vogel (Northrop Grumman Corporation), Quentin Herr (Northrop Grumman Corporation), Anna Herr (Northrop Grumman Corporation)

9:40 am — Towards Detection of Modified Firmware on Solid State Drives via Side Channel Analysis — *insert*

Dane Brown (U.S. Naval Academy), Owens Walker (U.S. Naval Academy), Ryan Rakvic (U.S. Naval Academy), Robert Ives (U.S. Naval Academy), Hau Ngo (U.S. Naval Academy), James Shey (U.S. Naval Academy), Justin Blanco (U.S. Naval Academy)

10:00 am — ***Break***

10:20 am — ***Session 8:*** *Experimentations & Optimizations* — *p.315*

Session Chair: Zeshan Chishti, Intel

10:20 am — Architecting a Hardware-Managed Hybrid DIMM Optimized for Cost/Performance — p.317

Fred Ware (Rambus Inc.), Javier Bueno (Metempsy), Liji Gopalakrishnan (Rambus Inc.), Brent Haukness (Rambus Inc.), Chris Haywood (Rambus Inc.), Toni Juan (Metempsy), Eric Linstadt (Rambus Inc.), Sally A. McKee (Clemson University), Steven C. Woo (Rambus Inc.), Kenneth L. Wright (Rambus Inc.), Craig Hampel (Rambus Inc.), Gary Bronner (Rambus Inc.)

10:40 am — A Performance & Power Comparison of Modern High-Speed DRAM Architectures — p.331

Shang Li (University of Maryland), Dhiraj Reddy (University of Maryland), Bruce Jacob (University of Maryland)

11:00 am — A Raspberry Pi Operating System for Exploring Advanced Memory System Concepts — p.344

Pascal Francis-Mezger (University of Maine), Vincent Weaver (University of Maine)

11:20 am — Stake: A Coupled Simulation Environment for RISC-V Memory Experiments — p.355

John Leidel (Tactical Computing Laboratories)

11:40 am — Driving into the Memory Wall: The Role of Memory for Advanced Driver Assistance Systems and Autonomous Driving — p.367

Matthias Jung (Fraunhofer), Sally A. McKee (Clemson University), Chirag Sudarshan (Technische Universität Kaiserslautern), Christoph Dropmann (Fraunhofer), Christian Weis (Technische Universität Kaiserslautern), Norbert Wehn (Technische Universität Kaiserslautern)

12:00 pm — ***Postamble:*** *J. Thomas Pawlowski*
Chief Technologist / Micron Fellow
Architecture Development, Micron

12:40 pm — ***Closing Remarks***