
AMW40

The 40th Asilomar Microcomputer Workshop

April 23-25, 2014

Motto: Data has Always been Big – It's the Bits that have gotten Small †

Wednesday, April 23

- 1:30pm** **Opening Remarks** – Marianne Mueller, *Asilomar Microcomputer Workshop*, General Chair
John Wharton, *Applications Research*, Program Chair
- 1:45pm** **Hackers in Space! – Citizen Forays to the Final Frontier** – John Wharton, *Applications Research*, Session Chair
- Lessons Learned in Autonomous Aviation
Maclen Marvit, *Intellectual Ventures*
 - Applying Mainstream Design Approaches to Spacecraft Communications
Helen Lurie, *Bit Beam Technologies*
- 2:45pm** **Break**
- 3:15pm** **Eponymous Microprocessor Session: Hitting the Wall** – Ken Shoemaker, *Intel Corp.*, Session Chair
- A Short Update on 3D Memories
Ken Shoemaker, *Intel Corporation*
 - Can Intel Again Dominate High-Volume Processor Markets?
Brian Case, *a2z Development (aka Amazon.com)*
 - Ultrathin Wireless 3D Chip Stacking
Dave Ditzel, *ThruChip Communications*
 - Being Dumb to Go Fast
Greg Lindahl, *blekko, inc.*
- 4:45pm** **Lightning Round I** – Lee Felsenstein††, *Only, LLC*, Interrupt Controller
- 5:00pm** **Welcome Reception and Dinner**

7:30pm Lightning Round II – Lee Felsenstein, *Fonly, LLC*, Interrupt Controller

7:45pm Athematic Short Talks – Bob Wedig, *Wedig Consulting*, Timekeeper

- Big Data Compressed
Dennis Allison, *Stanford University/Independent Consultant*
- Storage will be / A lot less free / Than it used to be
David S.H. Rosenthal, *Stanford University Libraries*
- The Seagate Kinetic Open Storage Architecture
Dave Anderson, *Seagate Technology*
- Teasing Big Robots: Behind the Scenes at the DARPA Robotics Challenge
Chris Wellens and Karl Auerbach, *InterWorking Labs*
- Making Software for Creative People (Who Don't Believe They're Creative Yet)
Kate Compton, *University of California, Santa Cruz*
- Getting the Software Train Out of the Station
Betsy Zeller, *Independent*
- Why Are We Here? The Prehistory of Microcomputer Software
John Wharton, *Applications Research*

10:30pm The Gary Kildall Story, *KCSM/Computer Chronicles Video (1995; 27 mins)*

Thursday, April 24

8:00am Old, New, Noisy, Blu: Lessons Learned From Big Data – Brian A. Berg, *Berg Software Design*, Session Chair

- Big Lies and Small Truths About Big Data
John Feland, *Argus Insights, Inc.*
- Freezing Exabytes of Data on Blu-ray Discs
Kestutis Patiejunas, *Facebook, Inc.*
- Are You Interested? Using NLP to Extract User Archetypes From Dating Profile Text
Thomas Levi, *PlentyOfFish Media, Inc.*

9:45am Break

10:15am Works in Progress – Marianne Mueller, *Asilomar Microcomputer Workshop*, Session Chair

- Time Sensitive Networking: Audio Video Bridging
Eric Allman, *University of California, Berkeley*
- Interface Technologies That Have Not (Yet) Left the Lab
Johnny Lee, *Google, Inc.*
- The Fall of the Stupid Network
Paul Vixie, CEO, *Farsight Security*

11:45am Lightning Round III – Lee Felsenstein, *Fonly, LLC*, Interrupt Controller

12:00n Lunch

- 1:30pm Lightning Round IV** – Lee Felsenstein, *Fonly, LLC*, Interrupt Controller
- 1:45pm Widgets, Gadgets, and Things ... Oh My!** – Bruce Koball, *Motion West*, Session Chair
- The Photonic Fence: Fighting Malaria with Lasers
Maclen Marvit, *Intellectual Ventures*
 - Back From the Dead: Retrofitting Furby for Network Connectivity
Dave Hampton, *SoundsAmazing!*
 - There's More Than One Way to Scan a Cat
Mark Dahmke, *Information Analytics*
- 3:00pm Break**
- 3:30pm Sports/Technology** – John Wharton, *Applications Research*, Session Chair
- Beyond Shrink It and Pink It: Sports Wearables Design For Everyone
Jen Costillo, *Bia Sport*
 - Augmented Reality at the America's Cup: The Technology Behind A.C. LiveLine
Stan Honey, *America's Cup Event Authority*
- 4:45pm Reception and Dinner**
- 7:30pm AMW Turns 40!** – Join us in Heather for Celebratory Cake and Champagne!
- 8:00pm Open Discussion: A Rich Asilomar Tradition** – Mary Eisenhart, *YOYOW*, RAT Patrol
Ten-minute presentations on any subject you choose. Contact Mary Eisenhart after registration to request your preferred time slot, first-come, first-reserved.

Friday, April 25

- 5:30am Pre-dawn data hunting and gathering** (Self-organizing; bring your own bit bucket)
- 8:00am Are We Safe Yet? Security Threats and Solutions** – Dan Kaminsky, *White Ops*, Session Chair
- A Billion Capabilities Served (and Counting)
Jonathan S. Shapiro, Ph.D., *PixelFab, LLC*.
 - Heartbleed: Why We're Failing at Global Risk Analysis.
Adam Cecchetti, *Deja vu Security*
 - Learning From Heartbleed: When Do We Start Solving The Right Problems?
Dan Kaminsky, *White Ops*
- 9:30am Break**
- 10:00am Too Much Information!** – Bill Cheswick, *University of Pennsylvania*, Moderator
Opening remarks and group discussion. Panel members to include:
- Bob Frankston, *Independant*
 - Dewayne Hendricks, *Tetherless Access*
 - Dan Kaminsky, *White Ops*
 - Tim Pozar, *Fandor*
 - David S.H. Rosenthal, *Stanford University Libraries*

- 11:30am Overview of IEEE Milestone Dedication Events†††**
- Brian A. Berg, *Berg Software Design*
 - Tom Rolander, *Former VP of Engineering, Digital Research, Inc.*
- Key events listed below. Maps and brochures are available describing the IEEE Milestones program and giving further details of this afternoon's events, times, locations, and speakers.*
- 11:45am Closing Remarks** – Marianne Mueller, *Asilomar Microcomputer Workshop*, General Chair
- 12:00pm Outdoor Lunch** (weather permitting)
- 2:00pm IEEE Milestone Dedication**, 300 Forest Ave. (*Pacific Grove City Chambers*)
- 4:00pm Street-Side Plaque Unveiling**, 801 Lighthouse Ave. (*Original Digital Research Offices*)
- 4:30pm IEEE Gala Reception**, 734 Lighthouse Ave. (*Former DRI Engineering Building*)

Program Committee

Brian A. Berg	Janet Guns	Tim Pozar
Bill Cheswick	Dewayne Hendricks	David S.H. Rosenthal
Sandy Clark	Dan Kaminsky	Ken Shoemaker
Fred Clegg	Bruce Koball	Fred Terman
Mary Eisenhart	Anne Mitchell	David Weekly
John Feland	Marianne Mueller	John Wharton

† *Film noir* fans might enjoy the clip at <<https://www.youtube.com/watch?v=TMUJpec6Bdc>>; skip to 0:32.

†† Special thanks to Lee Felsenstein for acting as the Lightning Round interrupt controller. It's good to see the crowd-management skills he honed at the Homebrew Computer Club being put to good use.

††† The IEEE Milestone honoring Gary Kildall and the development of CP/M was championed by David Laws, Semiconductor Curator at the Computer History Museum, with much help from 35-year Asilomar veteran Tom Rolander. Brian Berg worked with the IEEE to put the dedication ceremony together and coordinate its timing with the AMW40 schedule.

Dr. Shoemaker, perennial Freebies Goat, arranged the stemware and lab coats.

And a very special thank you indeed to Janet Guns, for working so heroically to tie up many hundreds of loose ends. Without her work, **AMW40** simply could not have happened.

*See y'all next year, at **AMW41!***

(April 15-17, 2015)

<www.amw.org>