
The Thirty-Seventh Asilomar Microcomputer Workshop

April 27-29, 2011

(Motto: Where Has All the Hardware Gone?)

Wednesday, April 27

1:30pm **Opening Remarks** – Marianne Mueller, *Gardener Communications*, General Chair

1:45pm **Eponymous Microprocessor Session** – Ken Shoemaker, *Intel Corporation*, Chair

- 3D Memory Interconnections
Ken Shoemaker, *Intel Corporation*
- Hardware Support for Security: Are You Capable? Catch My DIFT?
Andy Glew, *Intellectual Ventures*
- Abusing Digital Radio Chips
Travis Goodspeed, *Radiant Machines* and *University of Pennsylvania*

3:00pm **Break**

3:30pm **Prototyping Ideas** – John Feland, *Argus Insights*, Chair

- Junk Prototyping
Lora Oehlberg, *University of California, Berkeley*
- Prototyping People
Cara Silver, *Bassett & Partners* and *Stanford University*
- Where is the Maker Movement Headed?
Jim Newton, *TechShop*

5:00pm **Reception and Dinner**

7:30pm **Athematic Short Talks** – Bob Wedig, *Wedig Consulting, Inc.*, Chair

- Using Alice to Teach Programming to Eighth Graders
Bob Wedig, *Wedig Consulting, Inc.*
- DanKam: The Curious Project of Correcting Color Blindness
Dan Kaminsky, *DKH Inc.*
- Cryptographic Identification Using Bruno Latour's "Historicity of Things"
Eric Hughes, *Lytix*
- The Fukushima Disaster – Behind the Curtains
Chris Cockey, *Symbiotic Storage*
- iTeX on iPad: My Foray into Rejective C
Bill Cheswick, *AT&T Shannon Labs*
- Gigabit Broadband on the Cheap (and What This Means for Network Neutrality)
Tim Pozar, *Late Night Software*
- Social Networking Jumps the Shark
Steve McGeady, *ShiftWise* and *Drumlin Holdings LLC*

Thursday, April 28

8:15am **Mobile Medical Electronics** – Brian Berg, *Berg Software Design*, Chair

- Morphing Mobile Devices for Medical Uses
Ram Dhurjaty, *Dhurjaty Electronics Consulting*
- Bluetooth Low Energy: Use the Internet of Things to Help Manage an Aging Population – Joe Decuir, *CSR plc*
- Can Robotic Therapy Rewire the Brain?
Bob Horst, *Tibion Bionic Technologies*

9:45am **Break**

10:15am **Big Data** – Bob Wedig, *Wedig Consulting, Inc.*, Chair

- Using Storage Class Memory for Archives with DAWN, a Durable Array of Wimpy Nodes – Ian Adams, *University of California, Santa Cruz*
- I Do Not Think That File Contains What You Think It Contains
Andrew Hume, *AT&T Labs – Research*
- Using Storage to Make Better Storage
Chad Mitchell, *Seagate Technology*

11:45am **Lunch**

1:30pm **New Age Security and Privacy** – Marianne Mueller, *Gardener Communications*, Chair

- The Future of Information Security and Risk
Becky Bace, *Infidel, Inc.*
- PIR-Tor: Combining Technologies to Improve the Privacy of Online Communications
Ian Goldberg, *University of Waterloo*
- Fireside Chat: Measuring and Managing the Carnage of Network Insecurity
Dan Kaminsky, *DKH Inc.*

3:00pm **Break**

3:30pm **Keynote Presentation – Hummingbird: A Rotor Machine for the 21st Century**

Whitfield Diffie, Chief Cryptographer, *Revere Security*
Vice President for Information Security, *ICANN*
Visiting Scholar, *Center for International Security and Cooperation,*
Stanford University

4:15pm **The Future of Networking** – Tim Pozar, *Late Night Software*, Chair

- How the Internet Really Works From a Technical Perspective
Paul Vixie, *Internet Systems Consortium*
- Project CCNx: Content-Centric Networking
Van Jacobson, *Palo Alto Research Center*

5:15pm **Reception and Dinner**

7:30pm **Open Discussion: A Rich Asilomar Tradition** – Mary Eisenhart, *YOYOW*, RAT Patrol (Ten-minute presentations on any subject you choose. Contact Mary Eisenhart as soon as practical after registration to secure your time slot, randomly assigned.)

Friday, April 29

- 5:30am Offshore Census of Radioactive Koi** (*Self-organizing; Bring your own snorkel†*)
- 8:15am Navigating Time and Space** – John Wharton, *Applications Research*, Chair
- Stan & Neville's Excellent Adventure: The Technology of Open Sea Racing
John Wharton, *Applications Research* (with apologies and appreciation to Stan Honey, *Honey Navigation††*)
 - Team Frednet and the Google Lunar X-Prize Competition
Michael Lehman, *DreamTimeStudioZ*
- 9:15am Break**
- 9:45am Buffer Bloat** – David S.H. Rosenthal, *Stanford University Libraries*, Chair
- Packet Queue Control through a Rose-Colored Lens
Kathie Nichols, *Futurewei Center for Innovation*
 - Bufferbloat: Dark Buffers in the Internet
Jim Gettys, *Bell Labs*
 - Finishing the Internet
Dave Täht, *TekLibre*
- Open Issues** – Panel discussion and Q&A moderated by David S.H. Rosenthal
Above speakers to be joined by:
- Van Jacobson, *Palo Alto Research Center*
 - Paul Vixie, *Internet Systems Consortium*
- 11:45am Closing Remarks** – Marianne Mueller, *Gardener Communications*, General Chair
- 12:15pm Outdoor Barbecue Lunch** (weather permitting)
- 1:45pm Workshop Adjourns**

Program Committee

Michelle Aden
Brian A. Berg
Bill Cheswick
Fred Clegg
Mary Eisenhart
John Feland
Janet Guns

Dewayne Hendricks
Craig Hughes
Dan Kaminsky
Bruce Koball
Stan Mazor
Anne Mitchell
Marianne Mueller
Christine Peterson

Tim Pozar
David S.H. Rosenthal
Ken Shoemaker
Fred Terman
Bob Wedig
John Wharton
Pierluigi Zappacosta

Congratulations to Stan Mazor, recipient of President Obama's 2010 National Medal of Technology and Innovation for his role in co-inventing the microcomputer.

Notes: The ISS may be visible at 9:22pm Thursday, 11° above the northern horizon.
The final launch of Space Shuttle Endeavor is scheduled for 12:47pm PDT Friday.

† Offshore Census Takers: If anyone sees Blinky, please invite him to the barbecue.

†† Stan Honey is in New Zealand this week preparing for the 2013 America's Cup.

