The 41st Asilomar Microcomputer Workshop
April 15-17, 2015
Motto: "In a Clean Room, No One Can Hear You Scream." †

Wednesday, April 15

1:30pm Opening Remarks – Marianne Mueller, Asilomar Microcomputer Workshop, General Chair
John Wharton, Applications Research, Program Coordinator

1:45pm Looking Backward: Retrospectives on Emerging Technologies – Brian Berg, Berg Software Design, Session Chair
• The Fairchild Notebooks: Curating Silicon Valley's Sacred Scrolls
  David Laws, The Computer History Museum
• The Internet Archive: Hacking Cultural Institutions
  Brewster Kahle, Internet Archive

3:00pm Break

3:30pm Eponymous Microprocessor Session: Redefining Architecture – Ken Shoemaker, Intel Corporation, Session Chair
• Flash and Chips: A Case for Solid-State Warehouse-Scale Computers using Custom Silicon – Krste Asanović, University of California, Berkeley
• Balboa: FPGA Time- and Space-Sharing on Novena
  Star Simpson, Orion Labs
  Andy Isaacson, Noisebridge
• How It Really Works: Chip Design in the Age of IP Providers and Foundries
  Udo Walterscheidt, Ericsson

5:00pm Welcome Reception and Dinner

7:30pm Athematic Short Talks – Marianne Mueller, Asilomar Microcomputer Workshop, Timekeeper
• Minitel: The Web Before the Web
  Bernard Peuto, Concord Consulting
• Preserving Minitel's Legacy
  Marc Weber, Computer History Museum
• Recursive Interaction Between Concepts of Virtual Worlds and the Technology That Creates Them – Bob Jacobson, Bluefire Consulting
• It's Not Just About Computers: Rethinking Architecture for the Internet of Thangs – Pete Wilson, Freescale Discovery Labs
• Recovering and Recycling Out-of-Service Undersea Cables
  Sebastian Stephens, The SubSea Group
• Getting in Touch With Your Storage
  Tom Coughlin, Coughlin Associates
• Revisiting Mr. Cheswick: Fifty Facts for Finding Folks
  Ellen Cousins, Primos Research
• Notes of a Russian Serf: Working for Silicon Valley's Nouveau Nobility
  Lee Felsenstein, Fonly Institute

10:30pm  Late Night Snacks

Thursday, April 16

8:15am  The Changing Face of Embedded Applications – John Wharton, Applications Research, Session Chair
  • Eight-Bit μCs and the Serendipity of Smart-Transducer Networks
    John Wharton, Applications Research
  • Fun With Embedded Arduinos!
    Mark Dahmke, Information Analytics
  • Autonomous Vehicles on the Horizon
    Brad Templeton, Singularity University

9:45am  Break

10:15am  Capturing and Reconstructing Reality – Tim Pozar, Late Night Software, Session Chair
  • Bridging the Physical and Digital Worlds Through 3D Reconstruction
    Matt Bell, Matterport
  • A Cheap, Homemade LIDAR Scanner
    Robert Cousins, Primos Storage Technology
  • The Death of Mass Production: How 3D Scanning and Printing will Lead to Custom Everything – Adrian Perez, The Braject
  • Unexpected 3D Scanning
    Nikolai Oreshkin, Artec 3D Group

11:45am  Lunch

1:30pm  To Infinity and Beyond! – John Wharton, Applications Research, Session Chair
  • NASA Explorations of Space: Everything Old is New Again
    Dennis Wingo, Skycorp
  • Evaluating Commercial Off-the-Shelf Computers in Low-Earth Orbit
    Kathleen Morse, Yosemite Space
  • Design Strategies for Long-Duration Space Missions
    Frank Zegler, United Launch Alliance

3:00pm  Break

3:30pm  Security and Privacy of the Internet of Things – David S.H. Rosenthal, Stanford University Libraries, Session Chair
  • Embedded Device Insecurity
    Jim Gettys, Google, Inc.
  • Protecting Disk Firmware From Attacks
    Dave Anderson, Seagate Technology LLC
  • Late Secure Launch
    Andy Glew, MIPS Technologies
5:00pm  Reception and Dinner

7:30pm  Open Discussion: A Rich Asilomar Tradition – Mary Eisenhart,
        Mary Eisenhart Editorial Services, RAT Patrol
        Ten-minute presentations on any subject you choose. Contact Mary Eisenhart
        immediately upon registration to request a time slot, first-come, first-reserved.
        Warning: Some time-slot shrinkage may occur as the witching hour draws nigh.

Friday, April 17

5:30am  Pre-dawn tax filing marathon (Self-organizing; bring your own stamps and excuses)

        Session Chair
        • Why Can't I Email My Doctor? How No DNSSEC Means No SEC
          Dan Kaminsky, White Ops, Inc.
        • When Are We Going to Fix This Mess?
          Adam Cecchetti, Deja Vu Security, LLC

9:30am  Break

10:00am Looking Forward: Lessons Learned – Bill Cheswick, University of Pennsylvania,
        Panel Moderator.
        Opening remarks followed by group discussion.
        • Internet and Computer Security: I Think We Are Going to Win
          Bill Cheswick, University of Pennsylvania
        • The Future of Imagination: How Can We Ensure Creativity in an Increasingly
          Digital World? – Charlotte Lowe, Writer and Poet
        • Rethinking Photovoltaic Energy Production
          Dave Newman, Industry Gadfly
        • Additional panel members may be announced

11:45am Closing Remarks – Marianne Mueller, Asilomar Microcomputer Workshop, General Chair

12:15pm Outdoor Barbecue Lunch (weather permitting). Convene by the fire pit.

2:30pm  AMW41 Workshop Adjourns

Program Committee

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

† Dialog from Criminal Minds, Season 8/Episode 22, aired May 15, 2013.

Mark your calendars for AMW42, May 4-6, 2016.
("May the Fourth? Be with us!")
< www.amw.org >