
THE TWENTY-SEVENTH ASILOMAR MICROCOMPUTER WORKSHOP

2001: a tech odyssey

Wednesday, April 25

- 1:30pm** **Opening Remarks** – Mark Laubach, *Inconvenient Networks*, General Chair
John Wharton, *Applications Research*, Program Chair
- 1:45pm** **Space Odysseys** – John Wharton, *Applications Research*, Chair
- Rotary Rocket: The Last Revolution
Gary Hudson, *HMX Inc.*
 - Space-Based Global De-Warming –or– Anti-Venuforming Terra
Robert Kennedy, *The Ultimax Group*
 - Running Mir to Ground
John Wharton, *Applications Research*
- 3:00pm** **Break**
- 3:30pm** **Extreme Engineering** – Stan Mazor, *Numerical Technologies Inc.*, Chair
- Pogoing Palm Bots
Illah Nourbakhsh, *Carnegie –Mellon University*
 - On-Chip Turbans and Pumps –or– MEMS Are Made of This
Nick Tredennick, *Gilder Publishing*
 - Squeezing a Ton of Chickens in a Half-Ton Truck –or– How Was That Masked, Man? – Stan Mazor, *Numerical Technologies Inc.*
- 5:00pm** **Reception and Dinner**
- 7:30pm** **Athematic Short Talks Part I** – Bob Wedig, *Wedig Consulting*, Time Keeper
- The Permanent Email Server Initiative
Kurt Bollacker, *Long Now Foundation*
 - Data Immortality: How to Save Everybody's Data Forever for Almost Nothing.
Memory is Free, Eternally! – John Walker, *Fourmilab*
 - From My Living Room to Intel in 24 Years
Bert Forbes, *Intel Corp. – Retired*
 - Seeing the Fourth Dimension
Rudy Rucker, *San Jose State University*
- 8:45pm** **Break and Space Station Fly-Over** (details in note below committee list on page 3)
- 9:15pm** **Athematic Short Talks Part II** – Bob Wedig, *Wedig Consulting*, Time Keeper
- Putting the Squeeze on Web Bandwidth Costs
Lu Abel, *dotRocket*
 - Bringing Socially Beneficial Technology into the Service of Humanity
Jim Fruchterman, *The Benetech Initiative*
 - Defending the Public Interest: The UnFair Use of Standards
Shari Steele, *Electronic Frontier Foundation*

Wednesday, April 25 (cont.)

10:15pm **Wednesday Night at the Movies: 2001: A Space Odyssey** – Bruce Koball, *MotionWest*, Projectionist

Thursday, April 26

8:00am: High Tech Art – Brian Berg, *Berg Software Design*, Arts Supporter

- Applying Artificial Life: Computers as Collaborating Artists
Aaron Wolf Baum, *Algorithmic Artist*
- G-7 Stock Puppets
William Pietri, *Bianca/Scissor*; and Jim Mason, *Long Now Foundation*
- Internet Visualizations: '1:1' and 'Mapping the Web Infome'
Lisa Jevbratt, *San Jose State University/C5*

9:45pm **Break**

10:15am **How to Fix an Internet Election** – Marianne Mueller, *Sun Microsystems*, Chad Counter

- Why Computers Shouldn't Count Votes
Rebecca Mercuri, *Notable Software, Inc.*
- Problems with Internet Voting in Public Elections: David Jefferson, *Compaq Systems Research Center*; also with the *California Task Force on Internet Voting*
- Voting is an End-to-End System Problem!
Peter Neumann, *SRI International Computer Science Lab*

12:00n **Lunch**

1:30pm **20,000,000 Transistors Under the Sea** – Bruce Koball, *MotionWest*, Skipper

- The Northern Elephant Seal: Back from the Brink
Guy Oliver, *The Oceanic Society*
- Instrumentation of Deep-Diving Marine Mammals
Brent Wright, *Independent Consultant*:
- The Environmental Sample Processor (ESP): An Embedded System for Remote Detection of Microorganisms in the Environment
Chris Scholin, *MBARI (Monterey Bay Aquarium Research Institute)*

3:00pm **Break**

3:30pm **Graphics and Visualization** – Tamara Munzner, *Compaq SRC*, Alpha Sprite

- VNOS, a Visual Network Operating System
Mark Lacas, *Lone Wolf Technologies*
- DVI and Lightning-2: Letting Graphics Out of the Box
Gordon Stoll, *Intel Corp.*
- The Digital Michelangelo Project
Marc Levoy, *Stanford University*

5:00pm **Reception and Dinner**

7:15pm **Open Discussion: A Rich Asilomar Tradition:** Mary Eisenhart, *YOYOW*, RAT Patrol
(Ten-minute presentations on any subject you choose. Contact Mary Eisenhart any time after registration to secure your time slot, first-come first-assigned.)

Friday, April 27

- 8:15am Eponymous Microprocessor Session** – Ken Shoemaker, *Intel Corp.*, Chair
- Why the Itanium Processor Architecture is the Greatest Thing Since Sliced Bread
Kevin Rudd, *Intel Corp.*
 - The Piranha Eight-Way CMP Processor Architecture
Luiz André Barroso, *Compaq WRL*
- 9:30pm Break**
- 10:00am Where Eagles Dare: Spectrum Policy & Wireless Technology in Indian Country** –
Dewayne Hendricks, *Dandin Group*, Chair
- Cultural Issues
Steve Dupuis, *Salish Kootenai College*
 - Legal Issues
Lawrence Lessig, *Stanford Law School*
 - Technology Issues
Dewayne Hendricks, *Dandin Group*
- 11:30am Closing Remarks**
- 12:00n Outdoor Barbecue Lunch** (weather permitting)
- 1:15pm Panel Session: Where Did HAL Go Wrong?**
(Group discussion involving selected Workshop attendees; details and panel composition to be announced)
- 2:30pm Conference Adjourns**

Program Committee

Brian Berg	Mark Laubach	Ken Shoemaker
Fred Clegg	Stan Mazor	Fred Terman
Mary Eisenhart	Marianne Mueller	Bob Wedig
Dewayne Hendricks	Tamara Munzner	John Wharton
Bruce Koball	David S.H. Rosenthal	Pierluigi Zappacosta

Note on Space Shuttle/ISS Fly-Over: Weather permitting, Space Shuttle Endeavour and the International Space Station should be visible briefly (one minute or less) at 9:07pm on Wednesday, April 25. Look to the due south-west, approx. 10° above the horizon. Information on optimal viewing sites will be provided Wednesday evening.