2024

Vintage Computer Festival West

Program Guide
## Schedule

### Friday August 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Talks</th>
<th>Activities</th>
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<tbody>
<tr>
<td>10:00 am</td>
<td>SHOW OPENS</td>
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<tr>
<td>10:30 am</td>
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<tr>
<td>11:00 am</td>
<td>Lunar Lander and the GT40 – Scott Swazey</td>
<td>CHM 1401 Demo</td>
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<tr>
<td>11:30 am</td>
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<td>Consignment opens</td>
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<tr>
<td>12:00 pm</td>
<td>Engelbart, Edge Notched Cards, and Pre-Digital Hypertext – Sean Haas</td>
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<td>12:30 pm</td>
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<tr>
<td>1:00 pm</td>
<td>Before Macintosh: The Apple Lisa – David Greelish</td>
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<td>1:30 pm</td>
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<td>2:00 pm</td>
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<tr>
<td>2:30 pm</td>
<td>Whirlwind Software Restoration – Guy Fedorkow</td>
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<td>3:00 pm</td>
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<td>4:00 pm</td>
<td>Introduction to Digital Electronics: From Schematics to Circuits – Marcel Erz</td>
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<td>4:30 pm</td>
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<td>5:00 pm</td>
<td>Pennywhistle 103, the Modem Breakthrough – Lee Felsenstein</td>
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<td>6:00 pm</td>
<td>SHOW CLOSES</td>
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### Saturday August 3

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<thead>
<tr>
<th>Time</th>
<th>Talks</th>
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<tbody>
<tr>
<td>9:00 am</td>
<td>SHOW OPENS</td>
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<td>9:30 am</td>
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<tr>
<td>10:00 am</td>
<td>Extinction Event: Z80 - How will Modern/Retro Survive? – Sean Harrington</td>
<td>Consignment opens</td>
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<td>10:30 am</td>
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<td>CHM 1401 Demo</td>
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<td>11:00 am</td>
<td>Ada Programming Language: Then and Now – Richard Riehle</td>
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<td>11:30 am</td>
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<tr>
<td>12:00 pm</td>
<td>How Atari DNA Fueled Silicon Valley's Evolution – Howard Scott Warshaw</td>
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<td>12:30 pm</td>
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<tr>
<td>1:00 pm</td>
<td>Mastering PCB Design with KiCAD: From Concept to Creation – Marcel Erz</td>
<td>CHM 1401 Demo</td>
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<td>2:00 pm</td>
<td>Testing 678 Chips and Counting – Evie Salomon</td>
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<td>3:30 pm</td>
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<td>3:30 - Consignment closes</td>
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<td>4:30 pm</td>
<td>AWARDS</td>
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<td>5:00 pm</td>
<td>SHOW CLOSES</td>
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### Consignment

Friday, 11:00 am - 5:00 pm | Saturday, 10:00 am - 3:30 pm

The consignment area allows people to buy and sell vintage computer related items during our shows. Consignment will be located at the top of the stairs from the CHM entrance in the space beyond the classrooms. We will open up one or both classrooms for overflow if that space fills up.

Visitors to the show (other exhibitors included) will often stop by the consignment area looking for treasure. If you make a pricing deal please contact the seller and have them change the price in the system. They should change the price in the seller's account.

All consignment items, sold or unsold, MUST be removed promptly after the show closes on Saturday.
We review the circuit diagram stage by stage and describe the origin of the Pennywhistle 103 design. Pennywhistle 103, the Modern Breakthrough, is designed at MIT. When brought on line in 1950, Whirlwind Software Restoration is geared toward beginners who want to extend their vintage computers, focusing on TTL ICs and covering the fundamentals of digital circuit design.

Join me for an immersive crash course in digital Circuits. Dive into the world of PCB design with KiCAD. This session is geared towards beginners. From crafting schematics to generating PCB layouts and ordering prototypes, you’ll gain practical skills applicable to vintage computing and beyond.

Steve Jobs and the Apple Computer Revolution
Bobby Eaton
Displaying historical documents and vintage computers.

C64 - Commodore 64 Improved
François Bernier
The final prototype for a new motherboard for the C64.

Project Ivy
Katariina Mekki
A collection of rare and unusual IBM ThinkPads and portals. Including the famous 701c “Bicycle”, the early 2-in-1 360P; the cute and tiny, Japan-exclusive Pal Top PC 110, and the first ThinkPad laptop. 700 PS/2. All restored to full working condition and running period appropriate software.

WiFi Retrodemod
Scott Swazey
Swazey will be demoing his non-destructive WiFi upgrade to the popular Hayes Smartmodem series.

Game (almost) Over: The Return of Apple
Chris Turpin
This exhibit takes a look at an Apple that barely avoided bankruptcy and—under the direction of Steve Jobs—took Apple in a bold, new, colorful and sleek direction that would lay the foundation for Apple’s meteoric rise in the 2000s.

Friends of the Palo Alto Library
David Cartesi
Stacks of interesting computer books from the 80s and 90s for sale.

Core Memory - Interactive
Andy Geppert
Hands-on exhibit with Core Memory! This is a unique opportunity to try out fun demos using Core Memory in conventional and unconventional ways. Used throughout the Apollo program, learn how Core Memory and the unique properties which made it the most prevalent type of computer memory in the 1960s. Swirl some neon gas with a magnet and a 6502 while you’re at it... You can also buy a DIY kit so you can make your own Core Memory!

S100 Bus Computers New and Old
Jay Cotton
Several S100 bus computers, including a PDP11/73 and 2180 as well as 8080 and 8086 boards.

Live Circuit Board Re-caping & Repair
Anian Paylo
Live demonstration of replacing surface mount and through-hole capacitors, trace repair and board cleaning.

TETRIS on Early Soviet PCs and Apple 1 Clone
Mike Khryvkh
Various Soviet PCs running TETRIS along with Apple 1 and Apple II and an early Mac also running the game.

Keith’s Mac Hacks
Keith Kaisershot
Ordinary Macs, creative hacks.

IBM 1130 – System Source Computer Museum
Exhibition of a pair of IBM 1130.

VMBus Card Showcase
Dan Hembry
A collection of the VMBus (aka IEC 821), aka ANS/IEEE 1014-1987) including video cards, custom and prototype ISDN hardware, simple memory banks, and unusual high-reliability hardware of unknown provenance.

The MOnSter 6502 – Eric Schlaepfer
The MOnSter 6502 is a replica of the famous 8-bit 6502 CPU made out of discrete transistors (and LEDs) on a very large circuit board.

The Compact Macintosh Garden
Steve Brunwasser
A showcase of the original line of Apple Macintosh computers from its debut in 1984. Celebrate 40 years of the Mac and take a look at where it all began. Experience running software off floppy disks, and play classic video games in all their black and white glory.

UNIX and the Teletib Trailblazer
Steve Jones
The spread of UNIX and USENET created a niche for the Teletib Trailblazer. In the mid-1980s, when common moderns offered speeds of 1200 bps, the Trailblazer was over 10 times faster! This exhibit will have UNIX systems swapping files over Trailblazers with UUCP (and hopefully) NetNews/USENET too.

Apricot Computers - Fruity Alternatives from the United Kingdom – John Ball
The exhibit will consist of 4-5 computers spanning from the Victor 9000, which AIT would rebrand and market in Europe as the Sirius 1 and kick off their own market in Europe as the Sirius 1 and kick off their own computer line starting with the Apricot PC to their last non-PC compatible, the Apricot XEN. Each machine displays the stunning styling that ACT/Apricot would become famous for.

Keeping Commodore Alive
Nicholas Bustamante
Multiple commodores from 8-bit to 32-bit being kept alive with modern parts and add-ons. Some machines are stock, some are modified, but all provide the Amiga experience!

SPARC of Imagination
Julian Carter-Carvalho
Showcase of a few SPARC machines from Sun.

A History of ULTRIX
Madeline Autumn-Rose
ULTRIX started on the PDP-11 and made its way through the VAX to MIPS DECstations. Presented are interactive environments showcasing examples of all 3 architectures it ran on.

(Continued...)
Exhibitors, continued...

40 Years of Macintosh – Ryan Burke
The original Macintosh turned 40 this year! To celebrate, you can stop by and see every single compact Macintosh released in the U.S., along with some other unique additions in Apple’s history.

Long Live the 280I – David Henderson
A hands-on presentation of several systems celebrating the original 280I microprocessor, which is ceasing production after 48 years on the market. This versatile microprocessor was designed and developed by a team at Zilog including Federico Faggin, Ralph Ungermann and Masatoshi Shima.

Motorola 68000 Exorciser Systems Menagerie – Stanley Rupert
History and demonstration of Motorola 6800 development kits, development systems, and micromodules produced from 1975 to 1979. Highlighting function, utility, original documentation, and use in various settings from industrial control, academic and engineer training to research/engineering labs. Includes kits such as 6800D1, 68002, 6802D5, micromodule subsystems, up to disk based Exorciser Development systems.

8-bit flops – Audrey Moss
At least two if not more infamous examples of micros that lost the war to other computers, even within the same companies!

Prodigy Reloaded – Philip Heller
Prodigy Reloaded is a faithful re-implementation of the Prodigy online service backend, allowing the original client to work again. Experience the Prodigy service again, as you might have in 1989.

Random British Computers – Chris Satterfield
A selection of British Computers.

Rabbit Hole Computing – Alex Perez
Rabbit Hole Computing designs and manufactures advanced SCSI and IDE/ATAPI CD-ROM emulators.

J-PC ZONE – Duncan Mac Dougall
Japan had its own world of personal computers that did not reach Western shores. This exhibit aims to show several different running examples of these impressive platforms that most of the West missed. We will be demonstrating at least one playable example of an X68000, a PC-98 series system, an MSX2+, a PC-98, and an FM-TOWNS.

Turn It Up to 11 – Steve Toner
Harken back to those thrilling days of yesteryear when PDP-11s rules the planet and 8-bit microprocessors were just toys. Exhibit will include genuine PDP-11/73 and PDP-11/53 processors running with a combination of original and new (DIY) hardware.

Zhinu’s Portables ’All in Ones’ – Tyler Hayes
Demoting various 80s and 90s portable and All in One machine in fursuit.

Apple-1 Replicas – Daniel Kottke
Apple-1 replicas with C64 autoboot and NFT authentication.

Bitfitter’s Bits and Bytes – Michael Hill
A collection of old computers and modern gadgets for them.

SimCity for Unix – Antoni Sawicki
Classic SimCity for Solaris/HPUX/IRIX/Dec.

Keep Calm and Carry On (loading) – Steve Czreger
British computers from the 1980s. Acorn, Sinclair and others.

GT40 Lunar Lander – Scott Swaazy
This exhibit will showcase a working GT40 running Lunar Lander.

The Intel 8080, 50 Years and Counting – Francis Bauer
Introduced in April 1974, the Intel 8080 8-bit microprocessor played a large role in starting the microcomputer industry. Many of the early systems were based on the Intel 8080 and the subsequent Intel 8080A microprocessor.

The IBM 3270 Terminal Evolution – Dave K
A demonstration of IBM’s iconic 3277, 3278, and 3279 mainframe terminals connected to an emulated VM/370 host over coax running 3270 protocol with attached control unit.

World’s Largest Mac Plus (aka Mac Plus Plus) – Jason Jakrel
I built the world’s largest Mac Plus at 237% scale. It’s huge, it looks visually identical to a real 87 Mac Plus except for how large it is. Includes functional keyboard and mouse at scale too. Runs Mac System 7 like a Mac Plus should. Fully 3D printed one-off build.

Unix Workstations – Rico Pajarola
A collection of Unix workstations and X terminals from the 1980s and early 1990s.

Open Source CRT Monitor – Andrew Watterson
A demonstration of various CRT designs and utilities to create an open source CRT monitor.

Pac-Man Arcade PCB Replica – Logan Greer
This exhibit focuses on sharing my replica projects, such as a new Pac-Man PCB replica and other replicated Arcade electronics and PCBs.

Pen Based Computers – Thomas Conrad
Exhibiting Apple Newtons. By allowing guests to actually use the Newton, they can experience the Newton for themselves.

The role of events like VCF in the ecosystem of retro-technology enthusiasts can’t be overstated. They are gathering places for enthusiasts, each with a different desire in their interactions. There is value in both strict preservation and direct access to retro-technology, and understanding how they can interact, to further both long-term preservation and interactive recovery of the context of use. Such collaborations can only help to illuminate the history of computers for everyone.

CHRIS GARCIA
CURATOR, COMPUTER HISTORY MUSEUM
Welcome to the Vintage Computer Festival West 2024. You’re about to embark on a fantastic family-friendly adventure backward in time. You will see and touch dozens of historic computers from many decades gone – everything from big iron to eight-bitters. You’ll also experience some creative new replicas, modern enhancements, and new retrothemed systems. You will meet some historic people, learn their insider stories, and perhaps pick up our nerdily awesome t-shirt! While you’re here, remember to tour the amazing museum all around us: they’re a terrific host and worth a return trip. Be sure to talk about us online: #vcfwest

Happy computing,

- The Vintage Computer Federation

Our mission is to preserve computing history through education, outreach, conservation, and restoration. We strive to accomplish this through family friendly hands-on activities at our museum, at regional and global events, and by fostering and nurturing the expansion of our on-line and in-person communities. The Vintage Computer Federation is a 501(c)3 non-profit.

In addition to Vintage Computer Festival West, we also own VCF East (New Jersey each spring). There are also Vintage Computer Festivals independently run that we encourage everyone to attend, including: VCF Southwest (https://www.vcfsw.org/), VCF Midwest (https://vcfmw.org/), and VCF Southeast (A part of SFGE) (https://gameatl.com/)

If you are interested in creating your own chapter or festival, please contact us at info@vcfed.org.

Website: vcfed.org | VCF Forum: forum.vcfed.org
Facebook: https://www.facebook.com/vcfederation
YouTube: https://www.youtube.com/@vcfederation
Twitter: http://www.twitter.com/vcfederation
Instagram: http://www.instagram.com/vcfederation
Discord: https://discord.gg/32maJ6gddU