## KansasFest 2024 schedule

All times expressed in Central Daylight Time (Springfield, IL, time) (UTC-5)

### Monday 15 July 2024

2:00-5:00 PM Early bird arrival and check-in

#### Tuesday 16 July 2024

12:00-3:30 PM Check-in 5:00 PM KansasFest at UIS Orientation 5:30 PM Dinner (not provided, ordered in or bought out on the town)

### Wednesday 17 July 2024

- 7:00AM HackFest begins
- 8:00AM Breakfast (not provided, can buy in student center)
- 9:45 AM Welcome to Wednesday
- 10:00AM Garage Giveaway
- 11:30AM Lunch (not provided, can buy in student center)
- 1:00 PM Featured speaker: Rich Williams
- 3:30 PM Exhibition Hall / Swap Meet /Vendor fair
- 5:30 PM Dinner (provided, in dorm)
- 6:45 PM Hardware repair panel

Ron McAdams, Ian Primus, Joe Strosnider

8:00 PM SolderFest

### Thursday 18 July 2024

- 8:00AM Breakfast (not provided, can buy in student center)
- 9:50 AM Welcome to Thursday
- 10:00AM Karateka turns 40 (Jordan Mechner, Featured Speaker) Jordan Mechner (remote)
- 10:30AM The Plot Thickens: Adventures With The Apple 410 Color Plotter Kate Szkotnicki
- 11:15AM Apple2TS: Lights, Sound, Action!

Chris Torrence

- 12:00 PM Lunch (not provided, can buy in student center)
- 1:00 PM The Apple-Cat II

Paul Hagstrom

- 1:45 PM Apples behind the Iron Curtain (a history window) Jiří Doležal
- 3:00 PM Featured speaker: Rob Gemmell (remote)
- 5:30 PM Dinner (provided, in dorm)
- 7:00 PM Game night

# Friday 19 July 2024

- 8:00AM Breakfast (not provided, can buy in student center)
- 9:50AM Welcome to Friday
- 10:00AM Apple 2 floppy emulator and imager

Tom Giacchi

- 11:00AM The Nox Worldbuilder next gen A2 RPG content creation
  - Mark Lemmert
- 12:00 PM Lunch (not provided, can buy in student center)
- 2:30 PM Too clever by HALf: Running NES code on the Apple IIgs Lucas Scharenbroich

3:30 PM A2C Tangy Pack - Video adapter for the Apple IIc/IIc+

Rob Kim

3:45 PM Pico Micro Mac: Building a Macintosh 128K using the Raspberry Pi Pico

Ron McAdams

- 5:30 PM Dinner (provided, in dorm)
- 7:00 PM Apple II Forever awards
- 7:15 PM Contest winners
- 8:00 PM Marat][on II For Real This Time!

Kate Szkotnicki

## Saturday 20 July 2024

- 9:00 AM Ryan Suenaga Memorial Krispy Kreme Breakfast (provided, in dorm)
- 9:00AM HackFest ends
- 10:20AM Welcome to Saturday
- 10:30AM Apple II's Vintage Early Years: DVD Video Highlights

Stephen Buggie

11:30AM AppleTini II: Make It A Double

John Flanagan

- 10:30AM Lunch (provided, in dorm)
- $2{:}00\,\mathsf{PM}\,$  The SMB File System Translator for GS/OS

Stephen Heumann

2:45 PM The card for playing Doom on Apple II (ESP32 SoftCard) demonstration

Jiří Doležal

4:30 PM HackFest prizes

HackFest judges

5:30 PM Dinner (not provided, ordered in or bought out on the town)

# Sunday 21 July 2024

11am-1pm Check-out

| Session descriptions             |   |  |
|----------------------------------|---|--|
| Wed 1:00pm                       | Featured speaker: Rich Williams   |  |
| Williams                         | Rich was an Apple employee from 1979-2009, an early member of the IIc design team and was responsible for the mouse and serial port firmware. Rich was also the project lead for the DOS Toolkit and is the author of the FID and MUFFIN utilities. Rich ported the IIc firmware to the enhanced IIe ROM, wrote the IIGS memory manager, and also wrote drivers for the Apple III Twiggy, among many other projects. At KansasFest 2024, you'll hear Rich speak about the revolutionary changes at Apple during four decades, and you'll have a chance for one-on-one time with Rich to ask him about the intricacies of the IIGS memory manager, or the true meaning of the "FID" acronym. |  |
| Thu 10:00am                      | Karateka Turns 40 (Jordan Mechner, Featured Speaker)  |  |
| Mechner                          | This year marks the 40th anniversary of Jordan Mechner's beloved game, Karateka. Jordan will chat with us about making the game, the recent Digital Eclipse interactive documentary, his just-published autobiographical graphic novel, and more.   |  |
| Thu 10:30am<br><i>Szkotnicki</i> | The Plot Thickens: Adventures With The Apple 410 Color Plotter<br>An oft-forgotten and very under-supported device was the Apple 410 Color Plotter. Kate got her hands on one and<br>will spin the tale of her adventures in plotter land, from getting it set up, to finding parts, to actually making the plotter<br>well plot! Kate will have the plotter on hand for some hands-on time!  |  |

| Thu 1:00pm<br><i>Hagstrom</i>   | <b>The Apple-Cat II</b><br>The Apple-Cat II was a standout modem in the 300/1200 baud era. Not only could it communicate at 300 baud<br>("103"), it provided an ability to transfer at 1200 baud half-duplex ("202") at a time when 1200 baud full-duplex<br>("212") was price prohibitive for the home users. In addition, it had the ability to control appliances (X-10), generate<br>arbitrary tones (allowing it to dial touch tone, or even blow a 2600Hz whistle), recognize touch tones, add an RS232<br>serial port, connect a handset, control a tape recorder to record voice calls. Paul Hagstrom will walk through some of<br>the features and history, demo some of the functions, and talk through some of the software that targeted that<br>Apple-Cat II. And he'll discuss some of the technical implementation of rate switching, and discuss some of the BBS<br>drivers and Cat-Fur mods he wrote in the 1980s. |
|---------------------------------|---|
| Thu 1:30pm<br><i>Torrence</i>   | Apple2TS: Lights, Sound, Action!<br>Chris Torrence will present the latest developments on the Apple2TS, a browser-based Apple IIe emulator that runs<br>in all modern browsers, including mobile devices. Over the past year, with significant contributions from Michael<br>Morrison, support has been added for Mockingboard, MIDI, Imagewriter II printing, and connections to serial<br>devices. Chris will also demo the 6502 debugger within Apple2TS, which includes a full disassembler, conditional<br>breakpoints, time travel snapshots, as well as a unique hires graphics spyglass feature.   |
| Thu 2:15pm<br><i>Doležal</i>    | Apples behind the Iron Curtain (a history window)<br>A history lesson including notice about Apple IIs and Apple II clones in the sphere of Soviet influence.   |
| Thu 3:00pm<br><i>Gemmell</i>    | <b>Featured speaker: Rob Gemmell</b><br>Rob Gemmell will be joining us virtually during the event to describe his vision for the Apple IIc. As the initial designer, Rob created the look and feel for the computer, including the integrated disk drive, a carrying handle, and the overall design aesthetic. Rob saved everything from his time at Apple, and during his talk he will share his never-before-seen prototype drawings and photographs.   |
| Fri 10:00am<br><i>Giacchi</i>   | Apple 2 floppy emulator and imager<br>Beta software and hardware for disk emulator and also imager as an update from last year's presentation. Will show<br>windows and Android support. Features being shown will include emulator, floppy drive speed tester, fast imager (12<br>seconds) for standard floppies to woz image. Floppy verify for standard floppies in under 10 seconds. Show boot<br>tracer to woz image and nibble imager to woz and a2r.   |
| Fri 11:00am<br><i>Lemmert</i>   | The Nox Worldbuilder - next gen A2 RPG content creation<br>Development of Nox Archaist II: Dragonsmere (codename: the Quest for More Memory) is well underway. Over the<br>last year Mark Lemmert and Chris Torrence collaborated to develop a TypeScript/React/MySQL application to create<br>tile art, maps, NPC dialog and other content. The app embeds code from Chris's Apple2TS emulator so that it looks<br>like we're inside the game as we build it!  |
|                                 | In this session Mark will show in detail how the NWB will be used to create content for Nox Archaist II. He will contrast the NWB with the evolution of Apple II content creation from Richard Garriott's graph paper graphics process to the spreadsheet based tools of the original Nox Archaist game. Mark will likely also change all of the tiles on a Nox map from grass to cows with a couple clicks, just because he can.   |
| Fri 2:30pm<br>Scharenbroich     | <b>Too clever by HALf: Running NES code on the Apple IIgs</b><br>At last year's KansasFest, Lucas presented a proof-of-concept Hardware Abstraction Layer (HAL) for running<br>modified Nintendo Entertainment System (NES) game code on the Apple IIgs, based on his Generic Tile Engine<br>(GTE) project. Over the past year, this code was separated from the GTE library, streamlined and rewritten to better<br>align with the NES hardware capabilities and provide a more general platform for porting NES games. In this<br>session, Lucas will discuss the design and implementation of the HAL, show how it was used to port two different<br>games to the Apple IIgs and provide a live demonstration converting a simple NES homebrew game from its source<br>code to a working Apple IIgs application.   |
| Fri 8:00pm<br><i>Szkotnicki</i> | Marat][on II - For Real This Time!<br>Who is the grand champion of the Apple II? Six contestants enter, one contestant leaves! What games? No one<br>knows (Except Kate.) Sign up to play or just come spectate as Apple II gamers try to speedrun several pieces of<br>mystery software for bragging rights for the next year! Cheer for your favorite, gently heckle, or help out someone<br>who needs a pit stop! Full rules and system requirements will be published prior to KansasFest so you can come<br>ready! Signups will be available prior to the event!   |

| Sat 10:30am<br><i>Buggie</i>   | Apple II's Vintage Early Years: DVD Video Highlights<br>During my nine previous years at KansasFest, I have collected various VHS video tapes from the "Garage<br>Giveaway" tables. These videos present a broad survey of Apple products/ activities, mainly during the 1980s.<br>These videos have now been transferred to DVD disks. Apple celebrities featured prominently on these videos<br>include: Steve Wozniak, Steve Jobs, Roger Wagner, Tony Diaz, II Alive's Jerry Kindall, and others. My in-person<br>video presentation will include brief excerpts during the first 30 minutes. Remaining DVD 90 minutes will be longer<br>segments by A2 celebrities. The top video lecture will be by (1984-1994) former Apple CEO John Sculley, who<br>argued passionately and meaningfully that the A2 must be continued, in parallel, with the Macintosh. Everyone<br>attending KFest 2024 will be given a filled DVD disk; onliner viewers can email request to buggie@unm.edu to get<br>the DVD mailed. |
|--------------------------------|---|
| Sat 11:30am<br><i>Flanagan</i> | AppleTini II: Make It A Double<br>John Flanagan will present the current state of the AppleTini project. The v2 PCB prototype cards are capable of<br>exporting the Apple II bus from IIe and IIgs machines to external devices including desktops and Raspberry Pi<br>systems. Henry Asseily's Super Duper Display process supports cycle-perfect video mode switching, as well as<br>postprocessing filters to give your HDMI display a bit of classic flair. See what we've gotten working, what we<br>HAVEN'T gotten working, and what progress we've made on the v3 design, where we intend to support CPU<br>acceleration as well!  |
| Sat 2:00pm<br><i>Heumann</i>   | The SMB File System Translator for GS/OS<br>Stephen Heumann will introduce the SMB File System Translator (FST) for GS/OS. This new FST allows an Apple<br>IIGS to connect to SMB 2/3 file servers, including modern Windows and macOS computers. This session will include<br>a demonstration of the SMB FST, as well as a technical discussion of how it works and some of the challenges<br>involved in creating it.   |
| Sat 2:45pm<br><i>Doležal</i>   | The card for playing Doom on Apple II (ESP32 SoftCard) demonstration<br>As the author of the card probably will not attend KansasFest to present this personally, and I noticed some<br>ignorance of recent hardware among Kansasfest attendees, I can demonstrate SHORTLY some possibilities of the<br>card on behalf of its Bulgarian author.   |

# KansasFest/A24eVR 2024 schedule

All times expressed in Central Daylight Time (Springfield, IL, time) (UTC-5)

# Saturday, July 27, 2024

| 9:00 AM  | Welcome   |
|----------|---|
|          | Committee   |
| 9:15AM   | Apple 2 floppy emulator and imager  |
|          | Tom Giacchi*  |
| 10:00AM  | Making of the A2FPGA  |
|          | Ed Anuff, Josh Norrid   |
| 10:45 AM |   |
| 11:00AM  | Purpose-built software-defined hardware with the A2Pico<br>Oliver Schmidt |
| 11:45AM  | IIGS as Visual Jukebox  |
|          | Jay Craft   |
| 12:30 PM | "lunch" break (1 hr)  |
| 1:30 PM  | Celebrating The Print Shop's 40th Anniversary                             |
|          | April and Melody Ayres-Griffiths  |
| 2:15 PM  | Space Lace: an Interactive Kaleidoscope                                   |
|          | Lucia Grossberger Morales   |
| 2:45 PM  | break   |
| 3:00 PM  | Featured speaker: Rich Williams   |
|          | Rich Williams*  |
| 4:00 PM  |   |
| 4:15 PM  | The Apple-Cat II  |
|          | Paul Hagstrom*  |
| 5:00 PM  | Bobbin - using an A2 emulator in the Unix pipeline                        |
|          | Micah Cowan   |
| 5:15 PM  |   |
| 5:35 PM  | Q&A: AppleTini II: Make It A Double                                       |
|          | John Flanagan**   |
| 5:45 PM  | Fujinet for your Apple IIc and IIc+ - What can this thing do?             |
|          | Petar Puskarich   |
| 6:30 PM  | Day 1 wrap-up   |
|          | Committee   |
|          |   |
|          |   |

# Sunday, July 28, 2024

| 8:45 AM  | Welcome to Day 2   |
|----------|--|
|          | Committee  |
| 9:00AM   | Karateka Turns 40 (Jordan Mechner, Featured Speaker)           |
|          | Jordan Mechner   |
| 9:30AM   | The Plot Thickens: Adventures With The Apple 410 Color Plotter |
|          | Kate Szkotnicki  |
| 10:00AM  | Taki - the Text Animation KIt                                  |
|          | Micah Cowan  |
| 10:15AM  | A.P.P.L.E.'s Blast From the Past                               |
|          | Brian Wiser, Bill Martens                                      |
| 10:45 AM | break  |
| 11:00AM  | Cyrene : Cross-Platform Debugger for Apple II/IIgs             |
|          | Olivier Zardini  |
|          |  |

11:45AM Apples behind the Iron Curtain (a history window) Jiří Doležal\*

| 12:15 PM The | card for playing | Doom on Apple | e II (ESP32 Soft | Card) demonstration |
|--------------|------------------|---------------|------------------|---------------------|
|--------------|------------------|---------------|------------------|---------------------|

Jiří Doležal\*

- 12:30 PM "lunch" break (1 hr)
- 1:30 PM The SMB File System Translator for GS/OS
  - Stephen Heumann\*

2:15 PM Reverse Engineering Douglas Engelbart

Eric Rangell

#### 2:45 PM break

3:00 PM Featured speaker: Rob Gemmell Rob Gemmell\*

#### 4:00 PM break

- 4:15 PM Apple2TS: Lights, Sound, Action!
  - Chris Torrence
- 5:00 PM **Q&A: The Nox Worldbuilder next gen A2 RPG content creation** Mark Lemmert\*\*
- 5:10 PM Q&A: Too clever by Half: Running NES code on the Apple llgs

Lucas Scharenbroich\*\*

#### 5:20 PM Q&A: Apple II's Vintage Early Years: DVD Video Highlights

Stephen Buggie\*\*

5:30 PM break

- 5:45 PM Globaltalk for your Apples
  - Petar Puskarich
- 6:30 PM Apple II Forever awards, event wrap-up

Committee

- \* Recorded at UIS July 17-20, played here, followed by virtual Q&A session
- \*\* Recorded at UIS July 17-20, video to be made available online in advance

#### Session descriptions

| Sat 9:15am<br><i>Giacchi</i>  | <b>Apple 2 floppy emulator and imager</b><br>Beta software and hardware for disk emulator and also imager as an update from last year's presentation. Will show windows and Android support. Features being shown will include emulator, floppy drive speed tester, fast imager (12 seconds) for standard floppies to woz image. Floppy verify for standard floppies in under 10 seconds. Show boot tracer to woz image and nibble imager to woz and a2r.  |
|-------------------------------|--|
| Sat 10:00am<br>Anuff, Norrid  | Making of the A2FPGA<br>A2FPGA creators Ed Anuff and Josh Norrid will do a virtual session on the creation of the A2FPGA board starting<br>from breadboard to production as well as the development of the software that runs on it. They'll do a demo of key<br>features for getting started with the board, talk about future directions, and discuss how to extend the board for folks<br>who want to roll up their sleeves and hack on it.   |
| Sat 11:00am<br><i>Schmidt</i> | <b>Purpose-built software-defined hardware with the A2Pico</b><br>FPGAs are certainly the gold standard for software-defined hardware and have recently become cheap "enough".<br>So why bother with alternative approaches? Because there are not that many developers who know how to program<br>FPGAs. And even for them it takes quite some effort to create something new. For this reason, you usually only find<br>FPGA programs that emulate existing hardware. Emulating existing hardware ensures that there is enough software<br>using the FPGA program to justify the effort. In contrast, programming the A2Pico is much simpler. It enables a<br>different, creative approach to software-defined hardware. You start with a software idea and then create the exact<br>software-defined hardware that will best run that software. With the A2Pico library this only requires some C code.<br>Oliver will present two examples of such purpose-built software-defined hardware: "Interrupt Inversion" and "Page<br>Streaming". He created the latter for his "Bad Apple!!" demo, which he will show. |

| Sat 11:45am<br><i>Craft</i>          | <b>IIGS as Visual Jukebox</b><br>Thanks to its excellent sound chip and music playing capabilities, the IIGS makes a great jukebox for retro tunes.<br>But what about some companion visuals that sync to the music? Jay Craft will demonstrate a type of visualizer to<br>enjoy while traversing your playlist, along with some of the best MOD music he could find. A related IIGS case<br>addon will also be on display.   |
|--------------------------------------|---|
| Sat 1:30pm<br><i>Ayres-Griffiths</i> | <b>Celebrating The Print Shop's 40th Anniversary</b><br>Melody and April celebrate the 40th anniversary of The Print Shop by printing a fanfold KansasFest 2024 banner<br>using an Apple IIC, a Raspberry Pi running their microM8 emulator to act as an interface, and a modern dot-matrix<br>printer. They will discuss the interesting history of The Print Shop and Broderbund Software and their collective<br>impact on schools (and the presenters) in the 1980s, dot-matrix printer emulation in the context of microM8 and its<br>offshoot open source print interface printM8, and they will also discuss and display their Arrow 1000XL, a Canadian<br>Apple II+ clone made to compete in the local education market.  |
| Sat 2:15pm<br>Grossberger<br>Morales | Space Lace: an Interactive Kaleidoscope<br>Lucia Grossberger Morales started creating Apple Graphics in 1979. In 1987, Great Wave Software published<br>Space Lace: an Interactive Kaleidoscope, coauthored by Lucia Grossberger Morales and Bob Bishop. Space Lace<br>will be shown at the California Museum of Photography and AKG Buffalo. During the talk, Lucia will show Space<br>Lace and take the viewers through the educational portion. Viewers are invited to meet in Magic Light Box Gallery, a<br>virtual space in Spatial.<br>https://www.spatial.io/s/Magic-Lightbox-63a4f850b3a03b000108a4ae?share=2023185592766207640   |
| Sat 3:00pm<br><i>Williams</i>        | Featured speaker: Rich Williams<br>Rich was an Apple employee from 1979-2009, an early member of the IIc design team and was responsible for the<br>mouse and serial port firmware. Rich was also the project lead for the DOS Toolkit and is the author of the FID and<br>MUFFIN utilities. Rich ported the IIc firmware to the enhanced IIe ROM, wrote the IIGS memory manager, and also<br>wrote drivers for the Apple III Twiggy, among many other projects. At KansasFest 2024, you'll hear Rich speak about<br>the revolutionary changes at Apple during four decades, and you'll have a chance for one-on-one time with Rich to<br>ask him about the intricacies of the IIGS memory manager, or the true meaning of the "FID" acronym.   |
| Sat 4:15pm<br>Hagstrom               | <b>The Apple-Cat II</b><br>The Apple-Cat II was a standout modem in the 300/1200 baud era. Not only could it communicate at 300 baud<br>("103"), it provided an ability to transfer at 1200 baud half-duplex ("202") at a time when 1200 baud full-duplex<br>("212") was price prohibitive for the home users. In addition, it had the ability to control appliances (X-10), generate<br>arbitrary tones (allowing it to dial touch tone, or even blow a 2600Hz whistle), recognize touch tones, add an RS232<br>serial port, connect a handset, control a tape recorder to record voice calls. Paul Hagstrom will walk through some of<br>the features and history, demo some of the functions, and talk through some of the software that targeted that<br>Apple-Cat II. And he'll discuss some of the technical implementation of rate switching, and discuss some of the BBS<br>drivers and Cat-Fur mods he wrote in the 1980s. |
| Sat 5:00pm<br><i>Cowan</i>           | <b>Bobbin - using an A2 emulator in the Unix pipeline</b><br>Micah Cowan presents his (WIP, but functioning) Apple II emulator Bobbin, designed to do two things that the author<br>had not discovered amongst the many pre-existing emulators: (a) support a rapid development process by watching<br>loaded programs for changes (recompiles) and automatically restarting with the latest changes, and (b) read<br>"keyboard input" from the emulator's standard input, and write monitor output to the emulator's standard output. This<br>model allows the user to employ AppleSoft as a scripting language within their native command-line environment,<br>similar to Perl or Python, and has also (unintentionally) turned out to make Bobbin a useful emulator to pair with a<br>braille reader for the sight-impaired.  |
| Sat 5:35pm<br><i>Flanagan</i>        | AppleTini II: Make It A Double<br>John Flanagan will present the current state of the AppleTini project. The v2 PCB prototype cards are capable of<br>exporting the Apple II bus from IIe and IIgs machines to external devices including desktops and Raspberry Pi<br>systems. Henry Asseily's Super Duper Display process supports cycle-perfect video mode switching, as well as<br>postprocessing filters to give your HDMI display a bit of classic flair. See what we've gotten working, what we<br>HAVEN'T gotten working, and what progress we've made on the v3 design, where we intend to support CPU<br>acceleration as well!  |

| Sat 5:45pm<br><i>Puskarich</i>       | <b>Fujinet for your Apple IIc and IIc+ - What can this thing do?</b><br>Petar Puskarich will cover the many practical and a couple of impractical uses of the Fujinet device for your Apple IIc and IIc+. He will also include some quick examples of using the device across other Apple II and IIgs platforms as well. There has been much confusion as to the purpose of this device over the last 2 years and what it actually enables the user to do with it. This should hopefully be demystified by the time the session is over.  |
|--------------------------------------|---|
| Sun 9:00am                           | Karateka turns 40 (Jordan Mechner, Featured Speaker)  |
| Mechner                              | This year marks the 40th anniversary of Jordan Mechner's beloved game, Karateka. Jordan will chat with us about making the game, the recent Digital Eclipse interactive documentary, his just-published autobiographical graphic novel, and more.   |
| Sun 9:15am<br><i>Szkotnicki</i>      | The Plot Thickens: Adventures With The Apple 410 Color Plotter<br>An oft-forgotten and very under-supported device was the Apple 410 Color Plotter. Kate got her hands on one and<br>will spin the tale of her adventures in plotter land, from getting it set up, to finding parts, to actually making the plotter<br>well plot! Kate will have the plotter on hand for some hands-on time!  |
| Sun 10:00am<br><i>Cowan</i>          | Taki - the Text Animation KIt<br>Micah Cowan will present Taki, his F/LOSS machine-language toolkit that allows you to easily add animations to<br>your text output. Since the engine is in machine-language, even when you use it in your BASIC programs, the<br>animations are butter-smooth. The primary target is for use in "somewhat gimmicky" adventure game engines; text<br>continually animates while the user is typing commands at the prompt (including INPUT prompts). Make text slide in<br>from the side - multiple lines coming in at different timings! Make it seem as if multiple lines are being typed out by<br>multiple cursors simultaneously! Make the letters of a word continually "wave" - or make a word tremble, or wander<br>around as you're viewing it! Use glitchy or flickering text! Make musical notes sound for each letter printed! All of this<br>done with ease - even in AppleSoft! - using nothing but easy PRINT commands (using special control characters,<br>much like DOS), and requiring only that your BASIC program be started after Taki has been loaded with BRUN. |
| Sun 10:15am<br><i>Wiser, Martens</i> | A.P.P.L.E.'s Blast From the Past<br>Join Brian Wiser and Bill Martens for highlights of new A.P.P.LE. software and books that we've produced, along with<br>some special announcements and surprises! As the oldest official Apple user group from 1978, and being a<br>resource for current news, we've created a variety of Web sites (like VITNO, Take-1, Penguin, MECC, Beagle Bros,<br>Applied Engineering, Apple Archives), over 50 previous books, dozens of programs, and a PDF magazine that's<br>usually 50+ pages. Stay tuned for more!  |
| Sun 11:00am<br>Zardini               | <b>Cyrene : Cross-Platform Debugger for Apple II/IIgs</b><br>Brutal Deluxe Software will demonstrate their new cross-platform development tool used for Tracing / Debugging /<br>Analyzing code execution on an Apple IIgs Emulator (KEGS).   |
| Sun 11:45am<br><i>Doležal</i>        | Apples behind the Iron Curtain (a history window)<br>A history lesson including notice about Apple IIs and Apple II clones in the sphere of Soviet influence.   |
| Sun 12:15pm<br><i>Doležal</i>        | The card for playing Doom on Apple II (ESP32 SoftCard) demonstration<br>As the author of the card probably will not attend KansasFest to present this personally, and I noticed some<br>ignorance of recent hardware among Kansasfest attendees, I can demonstrate SHORTLY some possibilities of the<br>card on behalf of its Bulgarian author.   |
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| Sun 2:15pm<br><i>Rangell</i>         | <b>Reverse Engineering Douglas Engelbart</b><br>Eric Rangell will introduce Douglas Engelbart, inventor of the mouse, and his life work towards the goal of improving<br>how we more effectively work together using technology. He will demonstrate how a homemade chord keyset can<br>be interfaced to an Apple II via the game socket and programmed in Applesoft so you can practice typing with one<br>hand. The session will also demonstrate outlining technologies inspired by Doug's work, as well as projects to help<br>future generations experience the key features of the Hyper-Document systems that Doug envisioned.   |

| Sun 3:00pm    | Featured speaker: Rob Gemmell   |
|---------------|---|
| Gemmell       | Rob Gemmell will be joining us virtually during the event to describe his vision for the Apple IIc. As the initial designer, Rob created the look and feel for the computer, including the integrated disk drive, a carrying handle, and the overall design aesthetic. Rob saved everything from his time at Apple, and during his talk he will share his never-before-seen prototype drawings and photographs.   |
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| Torrence      | Chris Torrence will present the latest developments on the Apple2TS, a browser-based Apple IIe emulator that runs<br>in all modern browsers, including mobile devices. Over the past year, with significant contributions from Michael<br>Morrison, support has been added for Mockingboard, MIDI, Imagewriter II printing, and connections to serial<br>devices. Chris will also demo the 6502 debugger within Apple2TS, which includes a full disassembler, conditional<br>breakpoints, time travel snapshots, as well as a unique hires graphics spyglass feature.   |
| Sun 5:00pm    | The Nox Worldbuilder - next gen A2 RPG content creation   |
| Lemmert       | Development of Nox Archaist II: Dragonsmere (codename: the Quest for More Memory) is well underway. Over the last year Mark Lemmert and Chris Torrence collaborated to develop a TypeScript/React/MySQL application to create tile art, maps, NPC dialog and other content. The app embeds code from Chris's Apple2TS emulator so that it looks like we're inside the game as we build it! In this session Mark will show in detail how the NWB will be used to create content for Nox Archaist II. He will contrast the NWB with the evolution of Apple II content creation from Richard Garriott's graph paper graphics process to the spreadsheet based tools of the original Nox Archaist game. Mark will likely also change all of the tiles on a Nox map from grass to cows with a couple clicks, just because he can.  |
| Sun 5:10pm    | Too clever by HALf: Running NES code on the Apple IIgs  |
| Scharenbroich | At last year's KansasFest, Lucas presented a proof-of-concept Hardware Abstraction Layer (HAL) for running modified Nintendo Entertainment System (NES) game code on the Apple IIgs, based on his Generic Tile Engine (GTE) project. Over the past year, this code was separated from the GTE library, streamlined and rewritten to better align with the NES hardware capabilities and provide a more general platform for porting NES games. In this session, Lucas will discuss the design and implementation of the HAL, show how it was used to port two different games to the Apple IIgs and provide a live demonstration converting a simple NES homebrew game from its source code to a working Apple IIgs application.  |
| Sun 5:20pm    | Apple II's Vintage Early Years: DVD Video Highlights  |
| Buggie        | During my nine previous years at KansasFest, I have collected various VHS video tapes from the "Garage Giveaway" tables. These videos present a broad survey of Apple products/ activities, mainly during the 1980s. These videos have now been transferred to DVD disks. Apple celebrities featured prominently on these videos include: Steve Wozniak, Steve Jobs, Roger Wagner, Tony Diaz, II Alive's Jerry Kindall, and others. My in-person video presentation will include brief excerpts during the first 30 minutes. Remaining DVD 90 minutes will be longer segments by A2 celebrities. The top video lecture will be by (1984-1994) former Apple CEO John Sculley, who argued passionately and meaningfully that the A2 must be continued, in parallel, with the Macintosh. Everyone attending KFest 2024 will be given a filled DVD disk; onliner viewers can email request to buggie@unm.edu to get the DVD mailed. |
| Sun 5:45pm    | Globaltalk for your Apples  |
| Puskarich     | Petar Puskarich will present a session on getting your Apple II based machines onto the Internet based Appletalk zones via Globaltalk. He will cover what is needed to bridge your Apple II class machines to Localtalk or Ethertalk (GS with Uthernet II), or GSPort Emulation to the many Zones on the Internet hosted by others with Globaltalk routers and file services and print services. Be part of the GLOBAL APPLETALK NETWORK!   |