

The Digital

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Viking



Twin Cities

PC USER GROUP

NEWSLETTER

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*TC/PC Exists to
Facilitate and Encourage
the Cooperative Exchange of
PC Knowledge and
Information Across
All Levels of Experience*

September 2026

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General Meeting

Tuesday, September 8, 2026

7:00 PM

How Does Kodak Make Film?

Webinar 1 of 3

Via Zoom Only

Film photography is making a comeback with young people in the 18 to 35 year old bracket. These youngsters are wanting a return to the look and depth of photos captured on film and want to spend more time taking the perfect photo rather than taking a series of digital shots and choosing the best of the results. They are buying up older film cameras so if you have one or more sitting in a closet you might want to check with National Camera Exchange to see if it's worth selling yours on the secondary market. In light of all this we will be viewing another of the Get Smarter Every Day videos, this one a tour of the Kodak factory where they will show us how they make film. There are two other videos in this series which we will view next month. 📺

Note: All TC/PC Meetings and SIG Groups will be virtual until further notice. Visit tcpc.com for info.

**Tech Topics with Jack Ungerleider via Zoom at
6pm before the General Meeting.**



TC/PC is a
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Application form inside back cover

The Digital Viking

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Full page (7½ x 9½)	\$100.00
Two-thirds page (7½ x 6)	80.00
Half page (7½ x 4¾)	65.00
One-third page (7½ x 3)	50.00
Quarter page (3½ x 4¾)	40.00
Member Bus. Card (2 x 3½)	10.00

Multiple insertion discounts available.

Contact Sharon Walbran at: SQWalbran@yahoo.com

Deadline for ad placement is the 1st of the month prior to publication. All rates are per issue and for digital or camera-ready ads. Typesetting and other services are extra and must be requested in advance of submission deadlines.

Payment must accompany order unless other arrangements are made in advance. Please make checks payable to: **Twin Cities PC User Group**

TC/PC 2026-2027 Board of Directors

Meets once or twice per year. All members welcome to attend.

Visit www.tccpc.com for meeting details.

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and demonstrations

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Monthly Newsletter

Discounts on products
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Contests and prizes

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Viking* Newsletter

Up to 5 newsletters mailed to
your site
(only a nominal cost for each
additional 5 mailed)

Newsletter Staff

Editor Sharon Walbran

Upcoming Meetings and Events

VIBE Coding Competition

Hosted by OPCUG—Ottawa PC Users Group

Wed. Oct. 14, 2026 at 7:30 pm

[Details on Page 10]

Are Operating System Really All That Different? Let's See!

By Ken Pyzik, Contributing Author

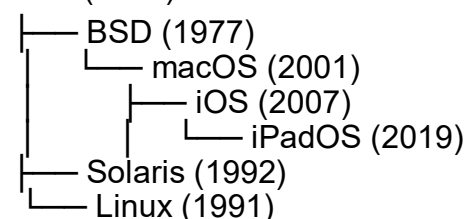
Sun City Summerlin Computer Club

<https://www.scscc.club> dkretch (at) gmail.com

Computer Operating Systems (OSes) are the invisible engines behind all your modern computing. They are quiet “conductors” (like an orchestra leader) that turn pieces of hardware into human-friendly machines. What started as specialized toolsets for academic researchers and businesses, used to run their machines, has grown into platforms that shape how billions of people live, work, and connect to each other.

In the late 1960s, an operating system known as Unix emerged from Bell Labs as a multi-user, multitasking environment for scientists. A decade later, a totally different OS – MS DOS, brought command-line control to the personal computer revolution. From these roots, two great lineages unfolded: the Unix family tree, branching into BSD, Linux, and eventually macOS and its mobile descendants; and the DOS (and later Windows NT) lines, evolving into MS Windows, the dominant desktop OS for decades. As shown in the diagram below – you can see how each OS evolved:

Unix (1969)



DOS (1981)

└─ Windows 3.x, 95, 98, ME (1985 → 2000)

Win NT (1993)

└─ Windows 2000, XP, Vista, 7, 8, 8.1, 10, 11 (Only Win 10 & 11 are still supported)

I added some material to the article, with Ken's consent, to expand on the history of Windows. Modern versions of Windows evolved from Windows NT, rather than from DOS, Windows 9x. – Tom Burt

Today, operating systems are no longer just technical scaffolding. They are full ecosystems. Android powers billions of smartphones all over the world. iOS defines most modern Apple mobile designs. Chrome OS has reshaped education. And Linux is silently running almost the entire computer cloud infrastructure.

Each system carries the DNA of its origin story, yet has adapted to new audiences, new purposes, and new costs.

Shared Roots, Different Faces

Even though Windows, macOS, Linux, Android, and iOS feel worlds apart, their origins are strikingly similar:

Unix roots: Multi-user, multitasking design principles from the late 1960s shaped BSD, Solaris, Linux, and eventually Apple's macOS/iOS/iPadOS.

DOS roots: Command-line simplicity gave rise to Windows, which still carries traces of DOS under the hood via the command-line/terminal app.

Academic & research beginnings: Most OSs started in labs or universities, designed for scientists, engineers, or business professionals. The progenitor of the modern Windows and Mac graphical user interfaces originated in Xerox's Palo Alto Research Center.

Evolution into ecosystems: Over time, these early efforts shifted from niche tools into global platforms, each adapting to new audiences but still carrying the DNA of their ancestors.

Cousins, Not Strangers

Think of operating systems as a family tree:

Unix → BSD → macOS → iOS → iPadOS

Unix → Linux → Android

DOS → Windows 95, 98, ME

Win NT → Windows 2000, XP, Vista, 7, 8, 8.1, 10, 11

PC Systems	Origin date	Original Purpose	Purpose Today	Original Audience	Audience Today	Original Cost	Cost Today
Windows 95, 98, ME	1995	Graphical shell for MS-DOS	Obsolete, unreliable and insecure	Business & home PC users	Global mainstream users	Licensed software (~\$100)	Bundled with PCs, ~\$100–200 standalone
Windows NT, 2000, XP, Vista, 7, 8, 8.1, 10, 11	1993	Full virtual memory, 32-bit, 64-bit, upward compatible, windowed OS	Dominant desktop OS, productivity, gaming	Business & home PC users	Global mainstream users	Licensed software (~\$100)	Bundled with PCs, ~\$100–200 standalone
Mac OS	1984	User-friendly GUI for Apple hardware	Creative industries, general computing	Designers, educators, Apple loyalists	Wider consumer base	~\$2,500 with hardware	Comes with Macs (hardware premium)
Linux	1991	Free, open-source Unix-like OS	Servers, dev tools, desktops	Developers, sysadmins	Broader adoption (cloud, enthusiasts)	Free	Free
Chromebook (Chrome OS)	2011	Lightweight OS for web apps	Cloud-centric computing	Students, budget users	Education, casual users	Low-cost laptops (~\$200)	~\$200–500

They branched in different directions, but they share common ancestors and design philosophies. That's why concepts like file systems, multitasking, user interfaces, and networking feel familiar across platforms — they're variations on the same themes.

Microsoft's Windows NT and its successors were built by a team headed by Dave Cutler, hired by Microsoft from Digital Equipment. Cutler was the architect of DEC's RSX 11 and Vax-VMS operating systems. NT replaced the MS-DOS / Windows 9x family as the mainstream Windows operating system.

The diagram above gives you a historical perspective of how the OSs evolved:

Phone Systems							
Android	2008	Open-source mobile OS	Dominant global mobile OS	Tech enthusiasts, OEMs	Global mainstream	Free (to OEMs)	Free (device cost varies)
iPhone (iOS)	2007	Touch-based smartphone OS	Premium mobile ecosystem	Early adopters, Apple fans	Global mainstream	~\$499	~\$799–1,299
iPad (iPadOS)	2010 (split from iOS in 2019)	Tablet-focused OS	Productivity, media, education	Apple fans, creatives	Students, professionals	~\$499	~\$329–1,099

Older / Defunct or little used							
DOS (MS-DOS)	1981	Command-line OS for IBM PCs	Legacy support, embedded systems	Business PC users	Hobbyists, retro computing	License d (~\$40–60)	Mostly free
Unix	1969	Multi-user, multitasking OS for research	Backbone of servers, OS design	<u>Researcher</u> s institutions	Enterprise, academia, OS derivatives	License d (AT&T)	Free variants (BSD), commercial licenses
BSD	1977	Academic Unix derivative	Secure, stable server OS	Universities	Developers, server admins	Free (open source)	Free
Solaris	1992	Enterprise Unix for SPARC hardware	Enterprise servers, niche deployments	Businesses	Specialized enterprise	License d	Free/open source (OpenSolaris), commercial support

Are OS Preferences Really All That Different?

Today, each of these Operating systems may look different: sleek touch interfaces, cloud-centric designs, or retro command lines, but they are mostly cousins in a shared lineage. Whether you boot up Windows, swipe on an iPhone, or log into Linux, you're interacting with ideas born decades ago in labs and garages. The family resemblance is unmistakable.

People often declare loyalty to one and disdain for another. But, beneath the surface, they are born from the same family of ideas: multitasking, user interfaces, file systems, and the drive to make machines more human-friendly.

When someone says: ***"I love Mac but hate Windows"*** or ***"Unix is superior to PCs"***, what they are really expressing is a preference for one paradigm over another. The underlying DNA inherited from Unix or DOS/Win NT remains remarkably similar. Each system evolved to serve different audiences, but they all share the same ancestry and the same mission: to bridge the gap between silicon and human imagination.

Preferences are real, and they shape how people work and play. Yet the differences are more about style and philosophy than about fundamental capability. Most of the functionality is available for all of these. Want to access the internet? Want to save a file? Write a letter? Sum up a spreadsheet? Type and send an e-mail? Every OS can do it.

The truth is, whether you boot into Windows, swipe on iOS, or log into Linux, you're standing on the shoulders of the same ancestors and using systems that can all accomplish the same basis tasks.

So perhaps the rivalry is less about which system is "better" and more about which cousin you feel most comfortable inviting into your daily life. And that's what makes the story of operating systems so fascinating: even though they are all different, in the grand scheme of things, they are still very much the same! 🖥️



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Adding Sight to Sound

By Don Grim, Editor, Computer Users of Erie

April 2026 issue of the CUE Newsletter

<http://www.cuerie.com>

grimcyber (at) yahoo.com

It used to be, during the 1970's or earlier, you would listen to music without any visuals. Anything you happen to see while listening to music is in your mind, from your own dreams or imagination, and it's still a nifty visual because it matches what you interpret from the music.

However, then came MTV in the early 1980's and certain songs were expected to have a visual, a "music video" on TV, to try to help it become a hit.

Having a visual with a song (a music video) is a step beyond just lyrics and music. It can add even more magic to music! In some cases, it is nice to create your own music video so it matches your interpretation. Also, a useful addition is to include lyrics for viewing in a music video. I had not designed a music video before, so I checked into it. I looked at Microsoft PowerPoint for Windows and Google Slides for a Chromebook, but I was not comfortable with either. With more time, I may have liked that better, but I tried other programs. I didn't want anything fancy, just a slideshow with a song playing in the background.

I tried NCH PhotoStage Slideshow Software, and it worked well for me. I used the free version for personal home use, which is available for a Chromebook. A free version is also available for Windows or Mac computers.

I didn't know much about making a music video, so I faked it and fumbled along.

Another term for that is "self-learning". In the past, that would involve a book, but now there is Google and AI to help answer your questions as you learn.

I decided to create my first music video for the first song that I produced through AI, my "Back to Woodsfield" song. You can read how I created that song and hear the song at:

www.mathisapath.com/DonSunoSongs.html

My first music video for that song, using PhotoStage, was a flubbed failure! The video ran, but the screens looked bad and grainy, like they had weathered through a storm, and the song did not play in the video. So, I looked at it further and found it defaulted to a low screen resolution. I set it at a higher resolution. I had added the MP3 audio song at PhotoStage, but I had not yet slid it over to the work area at the bottom of the screen.

After the above adjustments, I had a successful music video! The pictures were sharp rather than dull, and the song played in the background. So, in a nutshell, all I needed to create the music video was to add pictures and the song to the PhotoStage program, set the seconds for each picture to play on screen, and export it to an MP4 video file. I also saved the project. From there, I went to [youtube.com](https://www.youtube.com) and uploaded the MP4 file so the music video can be viewed by almost anyone at:

<https://youtu.be/2JBhLld-ur0>

To find pictures, I had some of my own, and I could search for royalty-free ones on [Pixabay.com](https://www.pixabay.com) and [Unsplash.com](https://unsplash.com). I cropped some of the pictures to make them a little bit better to use. I could have edited the screens in PhotoStage, but I found it more comfortable to create each screen first

as a page in Microsoft Word, including lyrics at the bottom of each page. I then saved the Word file as a PDF file. Then I went to www.smallpdf.com, which allowed me to convert each page of the PDF to a JPG. You can do the same conversion at www.ilovepdf.com. Those JPG files are the images I added to each screen in PhotoStage.

With hindsight, it probably would have been better to use landscape screens instead of portrait screens and to use a larger, more readable font for the lyrics.

It's nice to add your own selected pictures to a song, turning it into a music video of your choosing. It gives a whole new meaning to seeing what you hear and hearing what you see!

But, I'm not planning to add any other senses to a song, like vibrating touch (abrupt bass guitar), a smell to a song, a taste to a song, or even subliminal telepathy! 🖥️

VIBE CODING COMPETITION

This event is contingent upon submission of multiple entries (non-members are welcome to participate).

OPCUG will offer two prizes for submissions using vibe coding in a competition to be held at the club's monthly meeting in October. **Holding the competition will be subject to having multiple entries submitted.** The use of vibe coding will be on the honour system. For those providing entries, there will be two prizes offered: (1) the most useful product, and (2) the best presentation of the development process. Note that the project doesn't have to be successful for this second portion of the competition. Stories of trials and tribulations, and even abysmal failure will be happily accepted. So, get started on your vibe-coding project (see the article "**You Too Can Be A Programmer**" in the [March newsletter](#)). You have lots of time to refine both the code and the associated presentation. **When you are ready, submit your entry to the competition to: SuggestionBox@opcug.ca.**

This meeting will be via Zoom video conference.

Join us at <https://tinyurl.com/opcug-meeting>. The Zoom link will be live at 7:15 pm. The meeting will begin at 7:30 pm.

If the TinyURL link doesn't work, use:

<https://us02web.zoom.us/j/92495560898?pwd=cDNCcVdZVVRiZ3hQNHJzVDZNVHoxZz09>.

The above link includes the meeting ID and password. However, if you are prompted for the information, use:

Meeting ID: **924 9556 0898**

Password: **opcug**

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Meetings start at 7:00 PM (9:00 AM on Saturday) unless otherwise noted. *Virtual Meetings during Covid pandemic.

September

October

SUN	MON	TUES	WED	THU	FRI	SAT
		1	2	3	4	5
6	7	8 7pm General Mtg How Does Kodak Make Film? 1 of 3 6pm Tech Topics	9	10	11	12 Linux on Sat- urday 9:00 AM- Noon
13	14	15	16	17	18	19 MS Office (including Access) 9:00 AM— Noon
20	21	22	23	24	25	26
27	28	29	30	1	2	3
4	5	6	7	8	9	10 Linux on Sat- urday 9:00 AM- Noon
11	12	13 7pm General Mtg Kodak 2 and 3 6pm Tech Topics	14	15	16	17 MS Office (including Access) 9:00 AM— Noon
18	19	20	21	22	23	24
25	26	27	28	29	30	31



You have just read an issue of The Digital Viking.

Would you like to receive this delivered directly to your email or business each month?

As a member of TC/PC, the Twin Cities Personal Computer Group, one of the benefits is reading this monthly publication at www.tcpc.com.

As a member of TC/PC, you may attend any or all of the monthly Special Interest Group (SIG) meetings and be eligible for software drawings. The small membership fee also includes access to real-live people with answers via our helplines, discounts, and various other perks.

Does membership in this group sound like a good way to increase your computer knowledge?

It's easy to do! Simply fill in the form below and mail it to the address shown.
(If you use the form in this issue, you will receive an extra month for joining now.)



9/26

Here's the info for my TC/PC Membership:

Full name _____

Company name _____

Address _____

City _____ State _____ Zip _____

☐ Home ☐ Business ☐ Change address: ☐ Perm. ☐ Temp. 'til _____

Home phone _____ Work phone _____

Online address(es) _____

Where did you hear about TC/PC? _____

☐ I DO NOT want any of my information disclosed.

☐ I DO NOT want to receive any mailings

I'm signing up for3

☐ Individual/Family Membership (\$9)

☐ Business Membership (\$100)

If an existing member your # _____

Make checks payable to:

**Twin Cities PC User Group
341 County Rd C2 W
Roseville, MN 55113**

Or sign up on our website:

<http://www.tcpc.com>

☐ Check # _____ ☐ Bill me

☐ New member ☐ Renewal ☐ Prior member

I'm interested in:

☐ Training classes ☐ Volunteering

☐ Special Interest Groups: New User, Access, etc.

List here:

Administrative Use Only Rec'd _____ Chk# _____

September 8, 2026

7:00 pm

General Meeting

How Does Kodak Make Film?

Webinar 1 of 3

Via Zoom Only



341 County Rd C2 W
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FIRST CLASS MAIL