

\$3.00

(membership includes monthly subscription)

The Digital

Viking



Twin Cities
PC USER GROUP

NEWSLETTER

Minneapolis & St. Paul, Minnesota USA • Vol. 37 No.7 • Feb. 2017

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

February 2017

[Membership Information](#) 2

[Upcoming Meetings](#) 3

[Device Transparency](#) 3

[AMD A8-7670](#)

[Processor: Review](#) 4

[Nibblers](#) 6

[SIG Information](#) 10

[TC/PC Calendar](#) 11

[Wearable Technology](#) .12

[Google Virtual](#)

[Tours](#) 14

[Membership Application](#) .15

[Maps to Events](#) 16

General Meeting

Tuesday, Feb. 14, 2017

7:00 PM

What's a Website?

**A web developer takes a look
"behind the screen."**

Presenter: Curtiss Trout

Almost every organization, and some individuals, needs a website. Many/most potential customers will visit your website before they consider contacting or visiting you. We'll look at the mechanics behind websites and some ways you can build yours. Curt Trout has many years of experience creating and maintaining websites for his clients, including TC/PC. If you have been thinking about building your own website, this meeting should give you the basics and the incentive to get started. 🖥️

Tech Topics with Jack Ungerleider at 6PM before the General Meeting. Topic: Google Sites

TC/PC is a
Member of



24-Hour Information • www.tpc.com

Application form inside back cover

The Digital Viking

The Digital Viking is the official monthly publication of the Twin Cities PC User Group, a 501(c)(3) organization and an all-volunteer organization dedicated to users of IBM-compatible computers. Subscriptions are included in membership. We welcome articles and reviews from members. The Digital Viking is a copyrighted publication and reproduction of any material is expressly prohibited without permission. Exception: other User Groups may use material if unaltered and credited.

Disclaimer: All opinions are those of the authors and do not necessarily represent the opinions of the TC/PC, its Board of Directors, Officers, or newsletter staff. TC/PC does not endorse, rate, or otherwise officially comment on products available; therefore, readers are cautioned to rely on the opinions presented herein exclusively at their own risk. The Digital Viking, its contributors, and staff assume no liability for damages arising out of the publication or non-publication of any advertisement, article, or other item. All refunds in full or in part, for advertising, membership or any other item shall be at the sole discretion of the Twin Cities PC User Group Board of Directors.

Advertising

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 2016-2017 Board of Directors

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

Visit www.tpc.com for meeting details.

President — William Ryder	br@rydereng.com
Vice President — Curtiss Trout	ctrout@troutreach.com
Secretary - Sharon Walbran	sharon.walbran@gmail.com
Treasurer - Sharon Trout	strout@troutreach.com
Newsletter Publisher Sharon Walbran	952-925-2726 sharon.walbran@gmail.com
Web Master Curt Trout	ctrout@troutreach.com
Board Members:	
Steve Kuhlmeier	skuhlmeier@hotmail.com
Lon Ortner	612-824-4946 csacomp@comcast.net
William Ryder	br@rydereng.com
Jeannine Sloan	Ambassador for Friendship Village
Curtiss Trout	ctrout@troutreach.com
Sharon Trout	strout@troutreach.com
Jack Ungerleider	jack@jacku.com
Sharon Walbran	sharon.walbran@gmail.com

TC/PC Member Benefits

Product previews
and demonstrations

Special Interest Groups
Monthly Newsletter

Discounts on products
and services

Contests and prizes

Business Member Benefits

All of the above PLUS:

FREE ½ page ad on
payment of each renewal

20% discount on all ads
Placed in the *Digital
Viking* Newsletter

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

Newsletter Staff


Editor Sharon Walbran

Contributors:

Jeannine Sloan

Upcoming Meetings

Tuesday, March 14, 7:00 PM—Tech Dump/Tech Discount. The Head of Marketing for the computer parts recycler will be speaking to us on how the company got its start and promoting the importance of re-cycling. The company also runs two retail outlets that sell refurbished computers, both PC and Mac, and computer parts.

Tuesday, April 11, 7:00 PM—The Robotics Program at Hennepin Technical Center, in Eden Prairie. After Tech Topics, we will visit Hennepin Technical Center to learn about their robotics program and see a demonstration of some of the robots. 

Device Transparency (DT)

By Eric Moore, President, Computer Users' Group of Greeley, CO

May 2016 newsletter, Random Access, www.cugg.org, moore.e.s@att.net


As computer users increasingly have multiple devices—laptops, desktop computers, tablets, smartphones—on which they keep important data, being able to seamlessly access a file from any location or device becomes a challenge. Say if you are on a business trip with your laptop and smartphone, but realize you forgot to copy a report from your desktop computer to one of your mobile devices, you may find it a challenge to get what you need. Remote control software such as LogMeIn can allow you to remotely connect to the computer to download the file you need. Dropbox provides a means of sharing files with yourself and others through a cloud-based storage. VPNs and collaboration services such as Microsoft SharePoint are other possibilities for getting access to a file you need while away from home or the office.

"Device transparency" (DT) is a concept which could provide a seamless means of managing your files from any of your devices. Whether you need to transfer a photo from a smartphone to your laptop, play a music file residing on a Mac PowerBook on your Android device, or access a Word document from home on your tablet computer, device transparency would make this all possible. In a paper published at <http://www.brynosaurus.com/pub/net/devtransp.pdf>, researchers with MIT and the Max Planck Institute for Software Systems describe how such an ideal service would function. (At the time of the paper's writing, there was no service they were aware of that provided all of these features they propose.)

To summarize, the service would provide a means by which "metadata"—information about your files—would be shared between your devices. Such information would include the file types, names, and on which devices the files are stored. Without you needing to be consciously aware of where a particular file is located, you would be able to download the file from the device on which it is stored and open it on any other device you are using (provided it has sufficient storage space). The only requirement is that the device that has the file you need is "linked" into the file sharing service, is powered on, and has an active Internet connection.

Adobe DC to some extent has such features, although it is geared toward working with PDF documents. Services such as Dropbox are available for multiple devices and operating systems, so they can to some extent meet such needs, provided you carefully configure the software on each device to share the files you need. One downside to sharing your files through Dropbox is that they must be uploaded to the "cloud"—which is simply a server that the vendor provides for storing your files. This may be a privacy concern, depending on the contents of the files, and could be costly in

terms of the amount of storage space required (especially if you have a large music or photo collection). DT would mitigate this issue, as the files would not be stored in the cloud. It would also alleviate the need of every one of your devices synchronizing copies of all your files. Instead, the sharing of metadata would enable every device to be "aware" of your complete collection of files, so you can download what you need when you need it. Although the metadata may require many megabytes of storage, it would not be nearly so great as the storage space for the files themselves—especially high-fidelity photos, movies, and music files—which could require hundreds or thousands of megabytes of storage.

Device transparency is an interesting concept which could revolutionize how we work without our multiple computing devices. I am interested in seeing if such a service is developed sometime in the future. Depending how well-designed (easy-to-use) it is, and what measures are taken to protect users' privacy, I might consider using such a service for my laptop, desktop PC, and tablet computer. 

[Go to Page 1](#)

The AMD A8-7670 Processor: A Review

By Daniel Woodard, Member, The Dayton Microcomputer Association, OH

www.dma1.org, <http://www.majorgeeks.com/les/details/3dmark.html>

<http://www.geeks3d.com/gputest/>, DGW (at) DMA1.org

Would you consider yourself a gamer on a budget? If so, then AMD has a processor for you, the Godavari A8-7670K APU. Built using a 28nm process, the 95 Watt 7670K incorporates a Radeon R7 GPU (graphical processing unit) and fits in an FM2+ motherboard socket. The processor runs at a base speed of 3.6 GHz, and ramps up to 3.9 GHz as needed. The graphics portion of the chip runs at 757 MHz and has 384 stream processors.

The processor might appeal to those who already have an FM2+ based motherboard, or want something similar to a base line video card, but with the ability to upgrade easily. These processors have both the CPU and GPU combined into what AMD is calling an APU, or Accelerated Processing Unit. It might also appeal to those who want to minimize system fan noise, since there is no additional fan on a separate video card. A person who wants to keep total wattage under control (for example, to work with an existing system power supply) might also want one of these, since the combined CPU and graphics power usage is under 100 watts. Another plus is that the APU supports running DDR3 RAM at 2133 speeds, a jump up from some of the earlier models. The K at the end of the name also designates that this is a Black Edition, meaning that hobbyists can tinker around with the clock multiplier of both the CPU and GPU portions of the chip. I personally wanted to upgrade my A4-7300 based system, which I had built in late 2014, mostly because there were a few games my kids play where it did not quite keep up with demands. Otherwise, the A4-7300 had been quite an excellent choice for casual games, multimedia and productivity software for about \$45.

I first did some "everyday computing" type comparisons between an A4-7300 dual core processor running at 4 GHz and the A8-7670K. I started out running Hyper Pi, which is a multicore computation of Pi, out to 16 million digits. This took 11 minutes and 43 seconds on the A4, but only 9 minutes and 34 seconds on the A8-7670K.

Next, I took a folder containing a mix of files totaling 454 megabytes and used Winrar to do a compression. It took 4 minutes and 27 seconds on the A4, but 5 minutes and 25 seconds on the A8. The results were rather shocking at first—why would a processor with 4 cores take *longer* than one with 2 cores? Then I realized that I was using a very, very old version of Winrar—almost ten years old. It was very likely that this version only “saw” the first core on each processor, which would give the 4 GHz A4 an edge. However, as soon as I installed the latest version of Winrar and ran it using the A8, I saw the total time to compress the files drop to only 51 seconds! It was quite the *Aha!* moment for me—I had never before seen quite such a vivid example of why it is so important to upgrade software to more recent versions. Using the older versions of the software had been causing me to take about five times as long to accomplish the same task.

For the final part of the everyday computing benchmark test, I used Handbrake to compress a 44 minute 720p kid video to h.264/mpeg4. On the A4-7300, this took 28 minutes and 52 seconds, giving an average frame rate per second (fps) of 45.6. Using the A8-7670K, this took only 14 minutes and 40 seconds, giving an average fps of 89.6—converting the file in roughly half the time.

For 3D gaming comparisons, I used the 3DMark Sky Diver test, followed by the Geeks 3D GPU Test suite. The 3DMark Sky Diver test is exactly what it sounds like: a sky diver (glider, really—there are arm winglets like a flying squirrel) going through various scenes, putting the video card under strain to assess its capabilities, and giving an overall numerical score for comparison. For the Sky Diver test, final results for the A4 were 2,126 and for the A8 were 4,294—roughly double the ability. I also tested a Pentium G3220 based system I have with an actual Radeon R7 240 video card installed, and it finished the Sky Diver test with a score of 4,082. The Radeon R7 240 video card sells for about \$60 retail. As you can see from the results, the A8-7670K has a slightly better 3D performance than a stand-alone \$60 video card from about 24 months ago offers. That they have managed to build this into a processor and still stay under 100 Watts of power draw is an accomplishment.

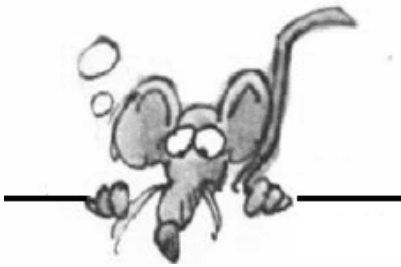
I also ran the Geeks 3D GPU Test suite, which offers a batch of different tests. These include something called furmark, tessmark, GiMark, Pixmark, Plot3D, and others. Many of these are a lot of fun to watch, so I would recommend trying it if you like to watch animations, fractals and such. Rather than putting the number results from all of these here, I'll just summarize by saying that the tests show an average 110% video performance increase from the A4-7300 to the A8-7670K, again more than doubling.

For a real-world gaming test, I used a Steam game called BeamNG.drive which my oldest son has loved playing with for the past year. It is essentially a 3D car physics simulation where players can drive a variety of vehicles through many different environments. On the A8 I obtained roughly 33-35 frames per second in game, while on the A4 the game showed an average of just 17-18 fps. The slower frame rate was still playable, but seemed very jerky in comparison. A person would definitely not want to go back to the slower frame rate after getting used to the better play of the A8-7670K for a few hours.

The A8-7670K is available for roughly \$105 to \$110, and sometimes under \$99 during sales. From reports on line, it appears that overclocks of 4.5 GHz are easily accomplished with a decent heat sink. For folks who aren't interested in overclocking, this is definitely one of the first processors around the \$100 price point that can competently allow 3D gaming at low to medium resolutions. If AMD continues to make advancements on their APU's, then we might actually see some folks doing budget gaming builds and returning to PC gaming (Steam, etc.) rather than buying game consoles.



[Go to Page 1](#)



NIBBLERS

By Jeannine Sloan

Voice-Powered Virtual Assistant

Amazon Echo is an always-on, always-listening Internet-connected speaker controlled with your voice. It features a personal assistant called Alexa. Alexa will play music, provide information, deliver news and sports scores, tell you the weather, control your smart home and more. Check out the list of capabilities included in this article: <http://www.pocket-lint.com/news/138846>

(Note: There are several brands of voice powered personal assistants, Alexa is not the only one.) Further reading: <https://www.cnet.com/how-to/amazon-alexa-device-compatibility-how-tos-andmuch-more/>

The Real Impact of Voice-Driven Computing

It's actually one of the best examples of what I call a "meta-OS", or a layer of software that sits at an abstracted level above traditional operating systems like Android, iOS or Windows, but still provides the ability for developers to create applications or services that work with it. The type of software being created for Alexa is very different from traditional mobile apps, however, and that's yet another of the profound changes that voice-controlled computing is starting to bring about. Read more here: <http://www.usatoday.com/story/tech/columnist/2017/01/13/voice-controlled-devices-shift-tech-industry/96491728/>

IoT Security

The Internet of Things has made it easier than ever to set up a smart home in which you can remotely control your door locks, lawnmowers, lights, thermostats, vacuums, and even pet feeders, using your smartphone and an app. It's also made it very easy (and relatively affordable) to monitor your home from just about anywhere with a smart security system. Smart security systems are highly customizable and are available as do-it-yourself kits or as full-blown setups that require professional installation. <http://www.pcmag.com/article2/0,2817,2498510,00.asp>

For History Buffs

Watch a movie length live demo given in 1968. It was the first time these computer capabilities were seen by anyone.

A multi-window interface

A graphic interface

Real-time, collaborative editing online

Revision control / editing

Underlined hypertext links

Video conferencing

The computer mouse

Dynamic file linking

<https://www.youtube.com/watch?v=yJDv-zdhzMY>

Be Prepared for the Future: Learn Twitter

Twitter is one of the biggest social networks on the Internet, but if you haven't joined it yet, you might have some questions. In this tutorial we'll go over all the basics of Twitter and offer you a ton of good

tips and trick along the way.

<https://www.youtube.com/watch?v=SBDYYGER5iM>

Technically Literate

Original works of short fiction with unique perspectives on technology, published exclusively by CNET.

Free to read on

<https://www.cnet.com/technically-literate/>

Blockchains-Public Digital Ledgers

Most people first encountered blockchains when they learned about the digital currency Bitcoin, which uses one to record transactions and resist counterfeiting. The technology made it possible for people who have never met and don't trust one another to exchange money without the aid of a traditional third party, like a bank. But many companies, researchers, and governments are now considering how blockchains could build trust and cut out middlemen in a broader range of commercial activities including banking, public services, supply chains, energy, and much more.

<https://www.technologyreview.com/s/603401>

Set Up a One-Click Shortcut for Creating a Restore Point in Windows 10

The WMIC way (Windows Management Instrumentation Command)

- Right-click on the desktop and select the New > Shortcut command from the context menu.
- In the text box, type the following command line:
- `cmd.exe /k "Wmic.exe /Namespace:\\root\\default Path SystemRestore Call CreateRestorePoint " ", 100, 7"`
- After you type the command, as shown in Figure C, click Next. Then, type a descriptive name for the shortcut, such as Create a Restore Point, and click Finish. Next, you'll need to configure the shortcut to run with administrator privileges. Configure the shortcut to run with administrator privileges
- Right-click the shortcut and select Properties from the 3. Make an image backup of Windows itself context menu.
- When you see the shortcut's Properties dialog box, locate and click the Advanced button. Then, in the Advanced Properties dialog box select the Run As Administrator check box
- click OK. <http://www.techrepublic.com/article/automating-system-restores-create-a-restore-pointprocess-in-windows-10/#ftag=RSS56d97e7>

Wearable-Biosensors-Flag-Illness

Wearable sensors that monitor heart rate, activity, skin temperature and other variables can reveal a lot about what is going on inside a person, including the onset of infection, inflammation and even insulin resistance, according to a study by researchers at the Stanford University School of Medicine.

Read more at: <https://phys.org/news/2017-01-wearablebiosensors-flag-illness-lyme.html#jCp>

Plex (software) for Streaming Content

Not to be confused with PLEX (programming language).

Plex is a client-server media player system and software suite comprising two main components.

- The **Plex Media Server** either running on Windows, macOS, Linux, FreeBSD or a NAS which organizes their player counterparts.
- The players can either be the **Plex Apps** available for mobile devices, smart TVs, and streaming boxes, or the web UI of the Plex Media Server called Plex Web App, or the old Plex player called Plex Home Theater. A premium version of the service, called Plex Pass, is also available and offers advanced features like synchronization with mobile devices, access to cloud storage providers, up to date and high quality metadata and matchings for music, multi-users mode, parental controls, access to high quality trailers and extras, wireless synchronization from mobile devices to the server, access to discounts on partner products and early access. [https://en.wikipedia.org/wiki/Plex_\(software\)](https://en.wikipedia.org/wiki/Plex_(software))

Home Monitoring Systems

Freeze alarms, water leaks, power outage, etc. are just a few of the concerns of absent property owners. Choosing a monitoring system for your specific needs can be daunting. These sites can help:

<https://www.electronichouse.com/downloads/17-questions-determine-ready-smart-home/>
<https://www.diycontrols.com/t-freeze-alarms-comparison-chart.aspx>

Armchair Archeology

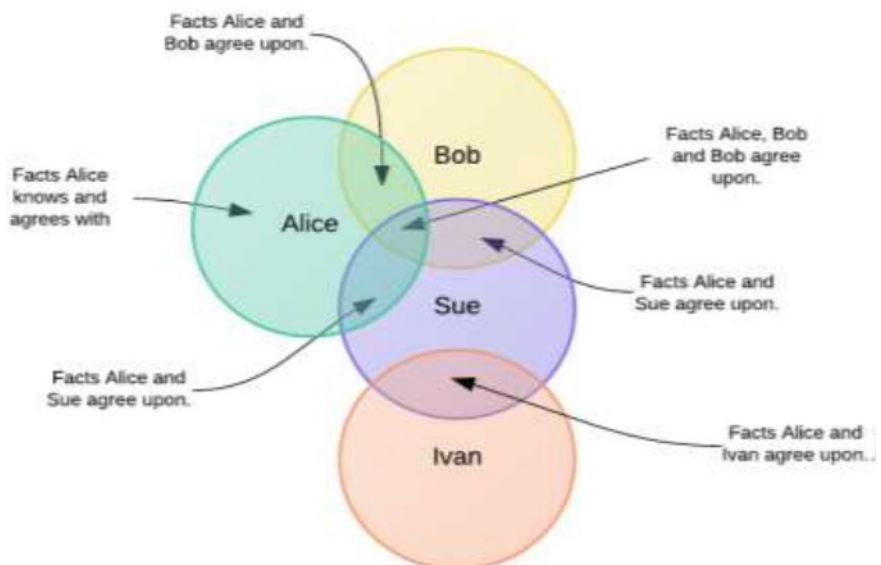
Launched by 2016 TED Prize winner and National Geographic Fellow, Dr. Sarah Parcak, as her “wish for the world,” GlobalXplorer^o aims to bring the wonder of archaeological discovery to all, and to help us better understand our connection to the past. Dr. Parcak aims to revolutionize how modern archaeology is done altogether, by creating a global network of citizen explorers, opening field schools to guide archaeological preservation on the ground, developing an archaeological institute, and even launching a satellite designed with archaeology in mind.

<https://www.globalexplorer.org/>

Bots are Every Where

Most website visitors aren't humans, but are instead bots—or, programs built to do automated tasks. They are the worker bees of the internet, and also the henchmen.

<https://www.theatlantic.com/technology/archive/2017/01/bots-bots-bots/515043/>



Data-X: Videobook Explains Blockchain Technology

Short lectures with slideshows explaining what blockchain is and how we might be using it.

<http://www.odbms.org/2016/06/videobook-explains-blockchain-technology/>

Blockchain–Distributed Asset Ledger

Data-X: Videobook Explains Blockchain Technology

Short lectures with slideshows explaining what blockchain is and how we might be using it.

<http://www.odbms.org/2016/06/videobook-explains-blockchain-technology/>

Blockchain–Distributed Asset Ledger

World record keeping is in the early stages of being converted to 'distributed ledger technology' commonly known as a 'blockchain'. Nations, industries, corporations, and even 'wall street' are involved in the process. A distributed ledger is essentially an asset database that can be shared across a network of multiple sites, geographies or institutions. All participants within a network can have their own identical copy of the ledger. Any changes to the ledger are reflected in all copies in minutes, or in some cases, seconds. The assets can be financial, legal, physical or electronic. The security and accuracy of the assets stored in the ledger are maintained cryptographically through the use of 'keys' and signatures to control who can do what within the shared ledger. Entries can also be updated by one, some or all of the participants, according to rules agreed by the network. Distributed ledger technologies have the potential to help governments to collect taxes, deliver benefits, issue passports, record land registries, assure the supply chain of goods and generally ensure the integrity of government records and services.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/492972/gs-16-1-distributed-ledger-technology.pdf

Blockchain in 2017

The first-ever Smart Contracts Symposium brought some of the world's foremost blockchain experts together in one room to demystify the technology and discuss all of the ways smart contracts will change the way we work. Read about the current state of blockchain tech here:

<http://www.pcmag.com/article/350088/blockchain-in-2017-the-year-of-smart-contracts>

Blockchain in Universal Electronic Health Records

Blockchain, the same technology that enables hackers to collect ransoms with anonymity, is increasingly seen as the best platform to advance universal electronic health records (EHRs). Read more: Blockchain, the same technology that enables hackers to collect ransoms with anonymity, is increasingly seen as the best platform to advance universal electronic health records (EHRs). <http://www.digitaltrends.com/computing/electronichealth-records-blockchain/#ixzz4XjpTEbHH>

2017 February 10



[Go to Page 1](#)

Special Interest Groups (SIGs)

w Work phone h Home phone c Cell phone
* Meets at an alternate location

Most SIGs will meet at Edina Executive Plaza, Conference Room #102, 5200 Willson Road, Edina, MN

Confirm with a SIG group if they meet elsewhere.
For more info contact the SIG Leader(s) listed here.

Get SIG announcements!
Link from www.tpc.com

Board of Directors*

All members are welcome! Check www.tpc.com for location.

Selected Saturday mornings

Linux on Saturday

This is for the Linux newbie and those trying to come over from Microsoft to a different operating system.

First Saturday @ 9 AM-Noon

Note: No Meetings June-August

Jack Ungerleider 612/418-3494 c
jack@jacku.com

Tech Topics

Technical presentation/discussion on various technical topics from the following areas:

- Web/Internet
- Mobile Devices and Apps
- Playing with Programming
- DIY (3D Printing, R-Pi, other hobby electronics, etc.)

Second Tuesday @ 6:00-7:00 PM

Every month

Right before the general meeting.

Jack Ungerleider 612/418-3494 c
jack@jacku.com

Microsoft Access

All levels. Presentations by expert developers within the group and by MS reps.

Third Saturday 9:00 AM—Noon

Note: No Meetings June-August

Steve Kuhlmeiy 952/934-8492
skuhlmeiy@hotmail.com

Microsoft Office

Addresses the use, integration, and nuances of the Microsoft Office applications.

Combined with Systems on Saturday

Third Saturday of the Month

9:00 AM—Noon

Note: No Meetings June-August

Steve Kuhlmeiy 952/934-8492
skuhlmeiy@hotmail.com

Directions to Summit Place for General Meetings:

Proceed to Eden Prairie Center Flying Cloud Drive . [Flying Cloud Drive runs along the West side of the Eden Prairie Center.] Once you have driven past Eden Prairie Center (on the left) along Flying Cloud Drive you will come to a stop light at Prairie Center Drive. The next intersection with a stop light and left turn lane is Fountain Place. Turn left at Fountain Place and go straight into the parking lot. Turn left again to the first covered entry way of Summit Place. There is plenty of parking in the large parking lot in front of the first Summit Place covered entry way. When you enter the door at the first covered entry way, ask to be directed to the Performance Room for the TC/PC meeting. For a map of more detailed directions and *info on Web SIG and Board meeting*, check the TC/PC website.

Directions to **Edina Executive Plaza** for **Systems on Saturday, Access, Word and Picture Perfect SIGs**: Take Highway 100 to the 50th Street/Vernon exit. [If you have come from the north, cross back over Highway 100 to the east side.] Take the first right and go past Perkins [The golf course will be on your left.] and continue on the east frontage road (Willson Road) to the next building—5200 . There is ample parking in the building's lot. Conference Room #102 is on 1st floor.

Help yourself by helping others!

Join the team & share your knowledge with others.

Contact TC/PC at www.tpc.com

Meetings start at 7:00 PM (9:00 AM on Saturday) unless otherwise noted. *Meets at Edina Executive Plaza.

February
March

SUN	MON	TUES	WED	THU	FRI	SAT
			1	2	3	4
5	6	7	8	9	10	11 Linux on Saturday 9:00 - Noon
12	13	14 Gen Mtg— What's a Website?Curt Trout 6PM Tech Topics	15	16	17	18 Microsoft Office on Saturday 9:00—Noon
19	20	21	22	23	24	25
26	27	28	1	2	3	4
5	6	7	8	9	10	11 Linux on Saturday 9:00 - Noon
12	1	14 Gen Mtg - Tech Dump/Tech Discount 6PM Tech Topics	15	16	17	18 Microsoft Office on Saturday 9:00—Noon
19	20	21	22	23	24	25
26	27	28	29	30	31	

[Go to Page 1](#)

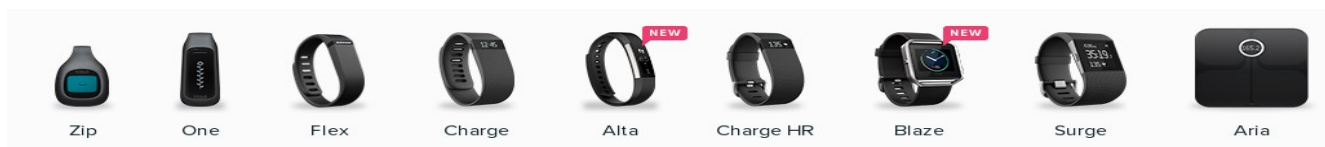
Quad-Cities Computer Society Meeting Review

Wearable Technology: Fitbit fitbit.com

Presented by Judi McDowell, QCS President

Reviewed by Joe Durham, Editor, Quad-Cities Computer Society, IA

May 2016 issue, Qbits, www.qcs.org, julee89 (at) gmail.com joseph85_us (at) yahoo.com



Fitbit Charge HR

At a recent meeting, Judi McDowell, QCS president, shared her knowledge and experience with wearable technology. The pace of technological change is fast and these devices are now the “in” thing for groups of all ages. She focused on the Fitbit devices as she has a Fitbit Charge which is one of the newer models in the Fitbit line of devices.

She asked for a show of hands among the audience for those who currently use this technology. There were 6 hands: 3 had a Fitbit Charge, one had a Fitbit Alta, one had a Fitbit Flex, and one had a Garmin device. This indicates that the desire to use these new gadgets is growing day by day, even among our QCS members.

Judi gave us an historical overview of how these devices emerged on the scene. Like all technological revolutions the fitness tracking device has its origins in many diverse needs and slowly the growth of technological change brought it all together.

Amazingly, it has its origin in the creation of the lie detector in 1921. A lie detector measures electronically your pulse, blood pressure, and there are sensors on your skin to measure changes there.

Segue to 1961 in Japan. A professor wanted the means to track walking for health. He

developed the pedometer, I am sure we have all seen these mechanical aids from time to time.

Now move to 1971 and car technology. The development of air bags brought forth the creation of the accelerometer which measures change in direction, an obvious requirement for air bag to deploy at the right moment in the event of a crash.

Now switch to 1974 and game technology was needed for the all of the new gaming controls, to help us enjoy and become a part of the experience. These advances help everyone navigate through Zelda, Donkey Kong and the rest.

1982 brought forth development from another direction; sports training. Devices appeared that monitored the athlete's heart rate.

In 1999 stationary bikes with monitoring and visual feedback were popular.

GPS technology came to the masses in the year 2000 when it was released for public use. Now there was an earth wide means of tracking movement.

A 3D accelerometer was developed in 2003 which allowed technicians to measure movement in all three directions: up, down, left and right, forward and backwards.


Take the mixture of all of these changes from 1921 to 2003, and a company was able put all of these functions into a small wearable size in 2008, Fitbit

The new models of Fitbit now monitor your heart rate, and sleep. All these functions designed to motivate us to a more healthy lifestyle with the means to monitor our goals in the device and online. James Park and Eric Freidmen were the creators of Fitbit. It is so popular that there are competitors in the marketplace from Apple, Android and Garmin.

In 2015 Fitbit was encouraged to issue an IPO and it is now worth around \$3.7 billion. And Park is now #29 on the list of those 40 or under in wealth.

c Judi mentioned that Fitbit Blog online is a good and enjoyable source for information and comment while using the devices.

You may have seen reports that Fitbit is being sued by some athletes for inaccurate results. With any measuring device of this type it is more noteworthy that you have the same device giving you data each day, it a base from which can accurately monitor your progress even though it may not tell you to the inch what your travel has been.

Judi concluded her remarks by observing that media forecasts see a 35% growth each year in personal tracking devices of this type for the next five years. It is certain that we all wish to improve our health status in life and devices of this nature will help move us along towards that goal. The QCS would like to thank Judi for her fine presentation and look into this new and emerging tech field.  [Go to Page 1](#)

Google Virtual Tours

By Geof Goodrum, Potomac Area Technology and Computer Society
May 2016 Issue, PATACS Posts, www.patacs.org
Director1(at)patacs.org

Explore and plan travel with Google Street View!

<https://www.google.com/maps/streetview/>

Google Data Center, Lenoir, NC

Google provides a guided video tour and Street View virtual access to its data center in Lenoir, North Carolina.

<https://www.google.com/about/datacenters/inside/streetview/>

McMurdo Station, Antarctica

Take a walk inside the Crary Science Center.

<https://www.google.com/maps/streetview/#antarctica/crary-science-center>

Yosemite National Park

Hike the steep and well-named Mist Trail.

<https://www.google.com/maps/streetview/#us-national-parks-and-historic-sites/yosemite-national-park-mist-trail>

The Bluebird Cafe, Nashville, TN

Famed local venue for Nashville's songwriters and musicians.

<https://goo.gl/maps/a7u7yE36RKK2>



[Go to Page 1](#)



You have just read an issue of The Digital Viking.

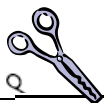
Would you like to receive this delivered directly to your email or business each month?

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



Here's the info for my TC/PC Membership:	2/17
Full name _____	I'm signing up for:
Company name _____	<input type="radio"/> Individual/Family Membership (\$18)
Address _____	<input type="radio"/> Business Membership (\$100)
City _____ State _____ Zip _____	If an existing member your # _____
<input type="radio"/> Home <input type="radio"/> Business <input type="radio"/> Change address: <input type="radio"/> Perm. <input type="radio"/> Temp. 'til _____	Make checks payable to:
Home phone _____ Work phone _____	Twin Cities PC User Group 341 County Rd C2 W Roseville, MN 55113
Online address(es) _____	<u>http://www.tpc.com</u>
Where did you hear about TC/PC? _____	<input type="radio"/> Check # _____ <input type="radio"/> Bill me <input type="radio"/> New member <input type="radio"/> Renewal <input type="radio"/> Prior member
<input type="radio"/> I DO NOT want any of my information disclosed.	I'm interested in:
<input type="radio"/> I DO NOT want to receive any mailings	<input type="radio"/> Training classes <input type="radio"/> Volunteering <input type="radio"/> Special Interest Groups: New User, Access, etc.
Administrative Use Only Rec'd _____ Chk# _____	List here:

Feb. 10, 2017
General Meeting 7:00 PM

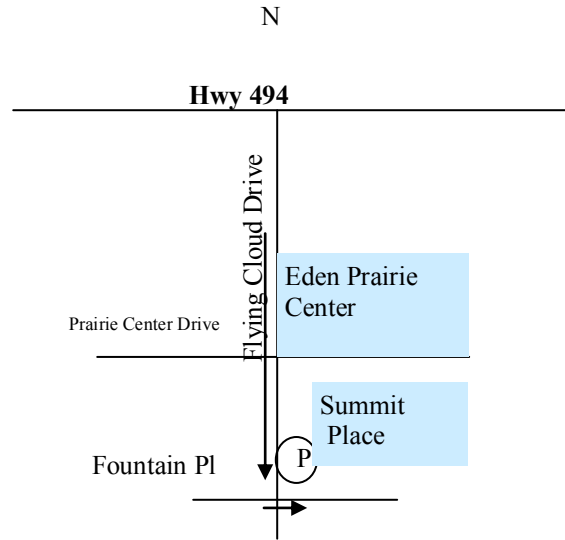
What's a Website?

**A web developer takes a look
"behind the screen."**

Presenter: Curtiss Trout

**Location: Summit Place
8505 Flying Cloud Drive
Eden Prairie, MN 55344**

More info and map: www.tpc.com



341 County Rd C2 W
Roseville, MN 55113

FIRST CLASS MAIL