

COMPUTER USERS OF ERIE

CUE Newsletter – March 2022 (Volume 39 Number 3)



*Happy
St. Patrick's Day!*

March CUE Meeting

The next general meeting is on Thursday March 17th at 7:00 PM, by a Zoom link in your email, with a demo by Rob Truman about Cutting The Cord (TV Without Cable). See the CUE Website Calendar for more about it.



Visit the CUE
Website at:

www.cuerie.com

CUE is a member of APCUG



Member of
**An International
Association of Technology
& Computer User Groups**

CUE Calendar



Calendar events are subject to change. SIG stands for Special Interest Group.
(look for notices outside of the newsletter for delays or special news on meetings)

CUE Membership Meetings (typically 3rd Thursday of each month)

Thursday March 17th at 7 PM

Thursday April 21st at 7 PM

Beginner's User Group (BUG) SIG Meetings

To Be Scheduled Upon Request

Digital Photo SIG Meetings (typically 1st Saturday of each month except June/July/August)

Saturday March 5th at 9:30 AM

Saturday April 2nd at 9:30 AM

Genealogy SIG Meetings (typically 1st Tuesday of each month)

Tuesday March 1st at 7 PM

Tuesday April 5th at 7 PM

MAC SIG Meetings (typically 2nd Saturday of each month except June/July/August)

Saturday March 12th at 9:30 AM

Saturday April 9th at 9:30 AM

Smartphone & Tablet SIG Meetings (typically 4th Monday of each month) (RSVP John Fair)

Monday March 28th at 7 PM

Monday April 25th at 7 PM

Windows SIG Meetings (typically 2nd Saturday of each month except June/July/August)

Saturday March 12th at 1 PM

Saturday April 9th at 1 PM

CUE Picnic

Sometime in September

CUE Christmas / Holiday Party

Thursday December 8th

The 2,000-Year-Old Computer

By Janice Castro at Computer Users of Erie

An article I read in *Astronomy Magazine* recently told a fascinating story of a discovery more than a century ago in the ruins of an ancient shipwreck, one that raised interesting questions about the origins of some modern technology. Approximately fifty years B.C., a huge Roman ship loaded with treasure and headed for home sank in a violent storm near the Greek island of Antikythera, at the edge of the Aegean Sea. Its cargo lay scattered across the sea floor near the island for almost 2,000 years, much of it covered with boulders and silt. Then, in 1901, sponge divers found the first evidence, pieces of marble statues of men and horses, and bronze figures.



Map of Antikythera wreck area showing position in Aegen Sea

Salvage crews and later, scientific expeditions, eventually recovered thousands of items, including 36 marble sculptures of Hercules, Ulysses, Apollo and other gods, three marble statues of horses, a bronze lyre, delicate vases, pottery, jewelry, and bronze and silver coins that helped date the wreck to the first

century B.C. They also found several corroded chunks of worked bronze, pieces of a device of some kind that came to be known as the Antikythera Mechanism. The items were sent to the National Archaeological Museum in Athens.

Little attention was paid to the mysterious mechanism until 1902, when an archaeologist noticed that there were finely calibrated bronze gear wheels in it and Greek writing on the outside. More than eighty pieces of the device were eventually recovered. Some thought it was a calculator of some kind, or a clock. But it would be many years before a detailed picture of the mechanism's workings would emerge.



Fragment A, front, Antikythera Mechanism

From 1951 until his death in 1983, English physicist Derek de Solla Price devoted himself to long-term study of the device. Two thousand years of corrosion made it impossible to take the device apart for study. But using radiograph X-ray imaging,

2,000-Year-Old Computer Continued

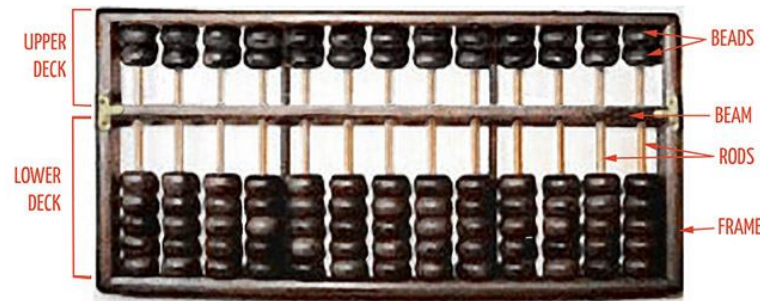
Price was able to discover dozens of additional gears inside the mechanism. Working with mathematician Otto Neugebauer, Price identified the purposes of each of several gears by counting their teeth. Two gears with 235 and 127 teeth respectively were thought to be associated with lunar cycles. Price was convinced that the Antikythera Mechanism was the world's first analog computer.

Wait a minute – analog computer? Really? I started thinking about definitions for some of the technology terms we use.

Britannica.com defines analog computers as, “any of a class of devices in which continuously variable physical quantities, such as electrical potential, fluid pressure or mechanical motion, are represented in a way analogous to the corresponding quantities in the problem to be solved. The analog system is set up according to initial conditions and then allowed to change freely. Answers to the problem are obtained by measuring the variables in the analog model.” Britannica goes on to offer helpful examples: “The earliest analog computers were special-purpose machines, as for example the tide predictor developed in 1873 by William Thomson (later known as Lord Kelvin).”

Now, that was interesting, Thomson's machine coming along nearly 2,000 years after the shipwreck. But then, what is a computer, when you get right down to it? As an English major, I might be tempted to go with the original definition of the term from the early 1600s, i.e. people skilled in making rapid calculations.

The earliest known calculating device seems to be the abacus, which dates back at least to 1100 BCE in Mesopotamia, and is still in use today – currently in Don Grim's man cave. The abacus, you may be surprised to hear, is a digital device.



Abacus

Many types of counting machines have been developed over the millenia. Scottish mathematician John Napier published his logarithm tables in 1614. Within a couple of decades, mathematician William Oughtred used them to invent his slide rule. The first was circular, but a year later he invented the more familiar rectangular version. NASA engineers used slide rules to plot the paths of Mercury, Gemini and Apollo spacecraft. Neil Armstrong and Buzz Aldrin took their slide rules on the Apollo 11 mission to the moon for last-minute calculations.



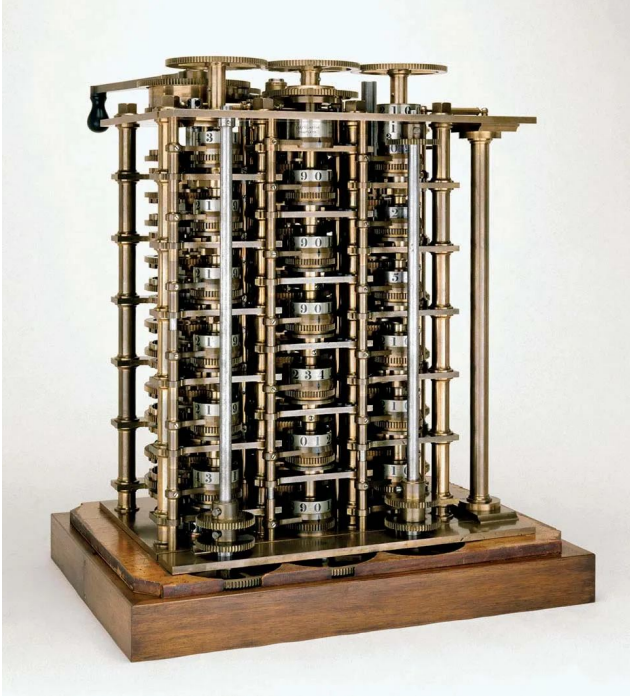
Imaged by Heritage Auctions, HA.com

Slide rule Buzz Aldrin took to the moon

Charles Babbage is often called the father of the analog computer, since he invented the plan for his “Difference Engine” in 1831. Unfortunately, he never finished

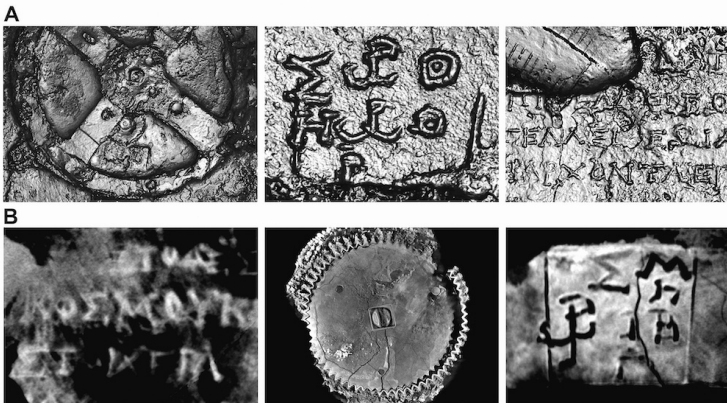
2,000-Year-Old Computer Continued

building one. But experts seem to agree that had he built his next invention, the “Analytical Engine,” it would have been a general purpose computer, both digital and programmable.



The Difference Engine, the portion built

But let's get back to the Antikytheran Mechanism. Studies with CT Scanning Technology and other means in the last couple of decades made it possible to read finely engraved inscriptions on its inner surfaces, including detailed astronomical information. There were at least 37 gears inside the device (possibly more, in parts that haven't been found).



Data courtesy Antikythera Mechanism Research Project, 2005

Polynomial Texture Mapping of A. M.

Some of the gears drove pointers, thought to have represented Mercury, Venus, Mars, Jupiter and Saturn. Turning a crank on the side of the device would display the positions of the sun, moon, and the planets for any selected date. Turn the crank several years ahead, for example, and it would show the date and even the hour when lunar eclipses would occur, and where the planets would be visible in the sky. Text on the outer plates of the device and on inner surfaces gave some information about it. The entire thing was about the size of a shoe box.

Astronomy.com describes it: “The mechanism could calculate 42 separate calendar functions, predict the motion of the Moon, the positions of the planets, and the timing of lunar and solar eclipses. It helped track religious ceremonies, festivals, and the Greek Panhellenic games, as well as other sporting events.”

Based on close analysis of clues in the wreckage, researchers think the device may have been made on the island of Rhodes. Part of one inscription in it refers to an event that occurred on Rhodes. The Antikythera Mechanism “predates other known examples of similar technology by more than 1,000 years,” said John Markoff in The New York Times. “Archaeologists and historians have long debated where the device was built, and by whom. Given its sophistication, some experts believe it must have been influenced, at least, by one of a small pantheon of legendary Greek scientists – perhaps Archimedes, Hipparchus or Posidonius.”

Tony Freeth, professor, University College, London, is part of a team that has studied

2,000-Year-Old Computer Continued

the device closely. “We’ve had to rethink the history of technology completely as a result of this single object,” he said. “It’s such a clever, extraordinarily sophisticated machine.”

Was the Antikythera Mechanism the world’s first analog computer? It is an analog device capable of complex calculations, and according to researchers who have studied it closely, it would have given accurate representations. But the first?

Perhaps it depends on your definition of computer. For a couple of decades, leaders in various science fields have talked about the information processes

they have discovered in nature. DNA has been described as “encoded representation of a living organism,” and DNA translation is “an information process that transforms the code into amino acids.” English physicist Stephen Wolfram has posited that all of nature is an information process.

Welcome to the computer.



Reconstruction of Antikythera Mechanism, Athens

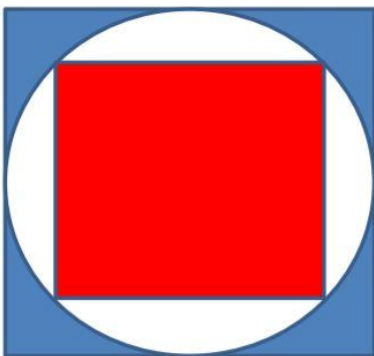
Developing π Formulas

By Don Grim at Computer Users of Erie

With Pi Day this month on March 14th, it is a day for everybody! For the math fans, it is a day of mathematical celebration! For the non-math fans, it is a day to enjoy eating pie!

To celebrate, I want to show the development of some pi formulas (π), in the most intuitive and understandable way possible, to me. The desire for wanting to understand formulas reminds me of my first day taking a Differential Equations class in college. The professor reminded the class that there were two types of students required to be there. The math majors were there to understand formulas. The engineering majors were there to build bridges and “just plug in formulas”! It’s probably not totally truthful. There must be some engineers that enjoy understanding the development of formulas!

Let’s start with an average for the area of a circle with a formula of πr^2 , which some say it as “Pi fans are squares”. Let’s look at a square drawn outside a circle and a square drawn inside a circle. If you take the average of the areas of those two squares, it can be an estimate of the area of the circle that lives between the two squares.



For the square outside the circle, the diameter of the circle is the length of the side of the square. The diameter is twice the radius, or $2r$. The area of a square is the side multiplied by the side ($A = s * s$). So, the area of the outer square is, $A = s * s = 2r * 2r = 4 r^2$ (four r squared).

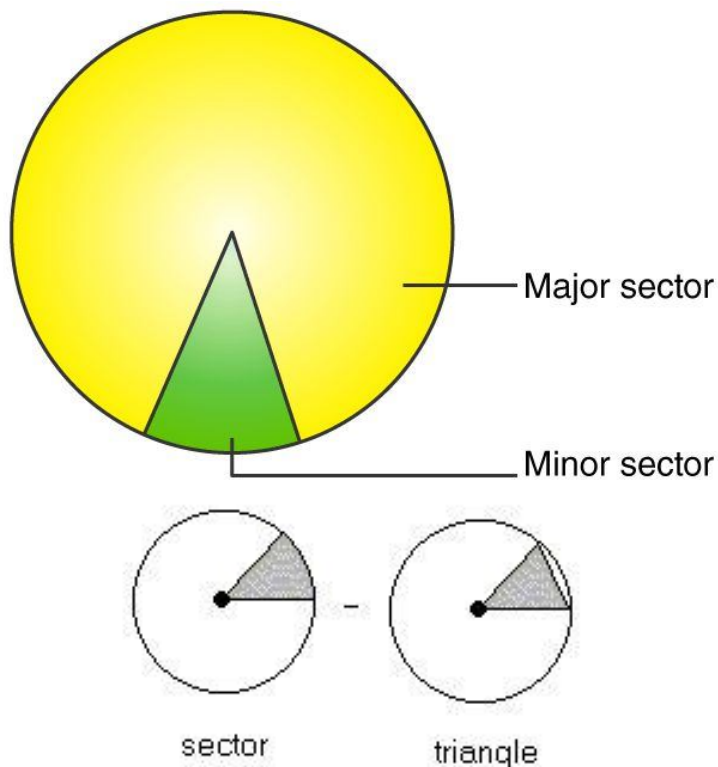
For the square inside the circle, the diameter of the circle is the diagonal of the square. The two sides of the square and the diagonal form a right triangle. Using the Pythagorean Theorem, we get $s^2 + s^2 = d^2$ (side squared plus side squared equals diameter squared). Solving for the length of the side, we get $2 s^2 = d^2$ and $s^2 = d^2 / 2$ and $s = d / \sqrt{2}$ and finally $s = 2r / \sqrt{2}$. So, the area of the inner square is, $A = s * s = (2r / \sqrt{2}) * (2r / \sqrt{2}) = (4 r^2) / 2 = 2 r^2$ (two r squared).

So, clearing all the smoke away, every circle has an outer square with area $4 r^2$ (four r squared) and an inner square with area $2 r^2$ (two r squared). It’s neat that the areas of the outer and inner squares come out so cleanly with coefficients of 4 and 2! The average of that is $3 r^2$ (three r squared) which is an estimate of the area of the circle. The actual area of a circle is πr^2 (or $3.14 r^2$), so the area of a circle is a little closer to the area of the outer square than the inner square.

Now, let’s develop the formula for the area of a circle ($A = \pi r^2$). My favorite way is to take a slice of the pie! Look at a sector (slice) of a circle then form a triangle from there. We know that the two sides coming up from the center of the circle are the

Developing π Formulas Continued

radius of r . We'll call the angle between those two sides as a .



That is an SAS triangle with an angle between two sides. Therefore, the area of the triangle is one half times the length of a side times the length of the other side times the sine of the angle. The area is:

$$\text{Area of triangle} = 0.5 * r * r * \sin a$$

How many slices do you want for the pie? Yogi Berra was known to say "you better cut the pizza in four pieces because I'm not hungry enough to eat six"! We'll call the number of sectors (slices) for the circle as n . Therefore, the angle would be the full circle at 360 degrees divided by slices of n , so that $a = 360 / n$.

So, now the area is:

$$\text{Area of triangle} = 0.5 * r * r * \sin (360/n)$$

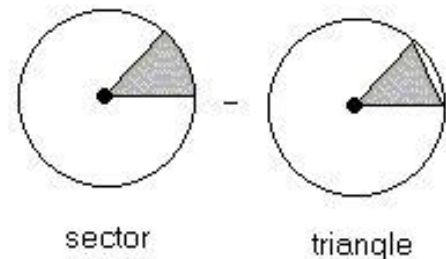
If we add the area of all the triangles, we get close to the area of the circle. As n gets larger and goes to infinity, we get closer to the area of the circle with the triangles getting even closer to the size of the sectors.

So, the area of all the triangles would be n times the area of a triangle:

$$\begin{aligned} \text{Area of all triangles} &= n * 0.5 * r * r * \sin (360/n) \\ &= r^2 * n * \sin (360/n) / 2 \end{aligned}$$

Well, as n goes to infinity $n * \sin (360/n) / 2$ goes to π ! Evaluating at $n=1000$, it is already at 3.141572, headed to π !

Therefore, as n goes to infinity, the triangles form a circle with area of πr^2 so the formula for the area of a circle is developed!



Now, let's develop the formula for the circumference of a circle ($C = 2 \pi r$). Let's take my favorite way again and take a slice of the pie! Form a sector and corresponding triangle again. Now let's use the Cosine Law on the triangle. By the way, the Cosine Law is more powerful than the Pythagorean Theorem! It has more options. In fact, the Pythagorean Theorem IS the Cosine Law for a specific angle of 90 degrees! Using the Cosine Law, let's find the length of the side of the triangle near the outside of the circle. We

Developing π Formulas Continued

already know the two other sides both have the length of the circle's radius of r .

$$(\text{Length of side})^2 = r^2 + r^2 - 2 r^2 \cos a$$

Take the square root of each side to get:

$$\text{Length of side} = r \sqrt{2 (1 - \cos a)}$$

Once again, the angle is 360 divided by the number of sectors ($a = 360 / n$).

So, the length is now:

$$\text{Length of side} = r \sqrt{2 (1 - \cos (360/n))}$$

If we add the length of all the sides, we get close to the circumference of the circle. As n gets larger and goes to infinity, we get closer to the circumference of the circle with the triangle sides getting even closer to the circle's circumference.

So, the length of all the sides would be n times the length of one side:

$$\text{length of all sides} = n * r \sqrt{2 (1 - \cos (360/n))} = 2 * r * n * \sqrt{1 - \cos (360/n)} / 2$$

Well, as n goes to infinity $n * \sqrt{2 (1 - \cos (360/n))} / 2$ goes to π ! Evaluating at $n=1000$, it is already at 3.141588, headed to π !

Therefore, as n goes to infinity, the sides form a circle with circumference of $2 \pi r$ so the formula for the circumference of a circle is developed!

So, with the above formulas, we have a few limits that describe π ! Both of the following approach π as n goes to infinity:

$$n * \sin (360/n) / 2$$

$$n * \sqrt{2 - 2 * \cos (360/n)} / 2$$

Let's go for one more limit that approaches π . It's not where you would go in a typical Calculus class because traditional Calculus courses like to use radians, instead of degrees. If you ask for the derivative of $\sin x$, the typical answer in Calculus courses is $\cos x$ (in radians). However, the derivative of $\sin x$, in degrees, is $(\pi/180) \cos x$. So, the Calculus "officials" invented radians to have a shorter answer for the derivative of $\sin x$. However, in doing so, they made it awkward since it can be confusing to Calculus students with a limited definition. Since trigonometric functions, like $\sin x$, reach π in limits, you are basically defining a function reaching π in π terms (a full circle is 2π radians or 360 degrees). It is kind of like describing water as a liquid that contains water (limited definition).

Moving away from my pet peeve about radians, let's use it to find another limit that approaches π ! The traditional proof in determining the derivative of $\sin x$ has you first determining that the limit as x approaches 0 of $\sin x / x$ is 1. It does equal 1 in radians but it equals $\pi / 180$ in degrees. Therefore, we have the following equaling π as x goes to 0 (in degrees):

$$(180 \sin x) / x$$

When $x=0.001$, it is 3.1415927 already getting close to π !

Developing π Formulas Continued

As x approaches infinity, the above quantity becomes the following, also going to π :

$$180 \times \sin(1/x)$$

When $x=1000$, it is also at 3.1415927 already getting close to π !

Is there “more to explore”? Yes, but enough for this Pi Day! There are multiple

ways to develop the formula for the volume of a sphere but that is for another time. I would also like to determine the volume of a 3.5 dimensional sphere. Is that possible? Well, if the fourth dimension is the spiritual world (Heaven) then perhaps the 3.5 dimension is the spot between death and Heaven, the “near-death experience” with bright light and peace. Just something I think about. Have a nice Pi Day and a Nice Forever!



“Assumption of the Virgin” painting from 1475 by Francesco Botticini
(portraying the Virgin Mary’s ascension to Heaven)

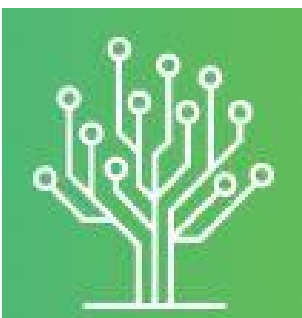
Genealogy Report for 2/1/22 SIG Meeting

The Genealogy SIG continues to meet on the first Tuesday of each month at 7:00 p.m. via Zoom. On February 1st there were fourteen in attendance and Sue Mueller called the meeting to order after some discussion on how to use a virtual background on Zoom.

Carl Zalewski related his success finding the Orloff family with the help of the Erie Cemetery Association. Much of the information to locate a grave is online at <http://www.eriecemeteryassoc.com/>. Carl visited the office and found records. It showed the cause of death but not the name of the mother or father of the individual. There was no marker for one child who died young but the association has a procedure to add markers even now.

Sue shared that Erie death records are online at <https://www.familysearch.org/> but they are not indexed so searching by location is best.

Pat reminded everyone of the <https://conferencekeeper.org/> website where a calendar of genealogy events is listed. Pat has taken many classes via Zoom and recommends them to the group.



Joe Schneider is working on a large number of boxes of historical documents that have been stored in the North East borough office. He has been sorting and sanitizing them as he goes along. They will be scanned and stored when the project is completed. People from the Hagen History Center have been out to look at what he is finding.

Kathy Mastantuono's 2nd great-grandfather was an immigrant from Baden, Germany, arriving in Erie in 1846. Following his arrival, he established a barrel-making business at 935 Parade Street. He also married in 1848, at St. Mary's Church. He died on May 1, 1866, in Erie, according to documents regarding the settling of his estate. St. Mary's Church does not have a record of his death. Kathy has been unable to find out how he died and where he is buried. She has searched all the cemeteries in the area, including Lakeside where his wife and son are buried so the search continues.

Paul Francis has had good success with the new Ancestry format. It shows potential relatives so a tree can be built backward.

Submitted by Connie Edwards.



Smartphone & Tablet Report for 2/28/22 SIG Meeting

This SIG met again after a two month hiatus. Since our November meeting, Apple has released four updates to the iOS 15 and iPadOS 15 operating systems, the most recent being iOS 15.3.1 and iPadOS 15.3.1. Each of these contained important security updates so we urged everyone to make sure they updated their device's operating systems and to be aware that 15.4 will be released in early March. That OS will enhance the Face ID feature to enable recognition of your face while wearing a mask.

The iPhone 13 family of phones is very popular among SIG members with a number of people upgrading from phones with home buttons. Since the iPhone 13 family phones use swipe gestures instead of the home button we played a video describing gesture controls. We also touched on Widgets, the App Library and a greatly expanded Spotlight Search which are new to iOS 15 and iPadOS 15.

Marques Brownlee reviewed the iPhone 13 in a very interesting YouTube video. While few people upgrade phones each year Marques highlighted three significant improvements for the iPhone 13 over the iPhone 12: the screen, the battery and the cameras. He gave a favorable review of the iPhone 13, but he was even more enthusiastic about the iPhone 13 Pro because the screen, battery and cameras were even more improved. He rated the

camera of the iPhone 13 Pro as the best he had ever seen in a smartphone.

We reviewed app improvements in iOS 15 and iPadOS 15. Apple bought the outstanding Dark Sky weather app and incorporated many of its features in the new Weather app. We demonstrated both the Weather app and Spotlight Search expanded capabilities. Typing the name of one of my favorite entertainers (James Taylor) into Spotlight Search brought up an abundance of material without opening a browser and using a search engine. Spotlight Search also brought up pictures from Photos when appropriate.

At the request of one of our members, we spent some time looking at the iPad and how the OS is nearly the same but not identical to that of the iPhone. Another member wanted to review the Find My app since her husband's new phone did not appear on her Find My app. Find My is the combination of Find My Phone and Find My Friend that occurred several operating systems ago. We referred her to the iPhone User Guide which has a very clear description of setting up and using Find My.

The next virtual meeting of the Smartphone and Tablet SIG is at 7:00 PM on Monday, March 28.

John Fair



**I've seen fire and
I've seen rain. I've
seen sunny days
that I thought
would never end.**

~ James Taylor

Secretary's Report for 2/17/22 CUE Meeting

Business meeting was called to order at 7:00 by President Conrad Sobczak.

Members Present: John Fair, Conrad Sobczak, Larry Brown, Janice Castro, Tim Donlin, Paul Francis, Don Grim, Ed Group, Nancy Group, Tom Kuklinski, Bob Jaworski, Marcia Keller, Hal Kelley, Joanne Kleinhantz, Carol Korn, Pat Mickel, Sue Mueller, Ann Rosthauser, Joe Schneider, John Szympruch, Liz Wisniewski, and Lee Williams.

Guests: Bill James, speaker; Judy Taylour, APCUG

Quorum (at least 20% of members): The number of member attendees exceeds the quorum requirements (18).

It was moved, seconded and approved by membership that the minutes of the January 20, 2022, general meeting published in the February 2022 newsletter be approved as published.

Reports:

Treasurer's Report, John Fair:
Expenditures: \$277.98, holiday party; \$178.98, printing and mailing of directory; \$166 post box rental; \$50.00, APCUG membership. Our current balance is \$3402.61. We are currently reviewing our insurance coverage and needs given that our meetings are via Zoom. Judy Taylour, APCUG, reported that many other of the APCUG-member computer clubs had dropped their insurance when they switched over to Zoom meetings. The full treasurer's report will be filed for audit.

Membership Report, John Fair: We continue to have 75 members and 8 associate members.

Special Interest Groups:

- Genealogy: Meets first Tuesday of each month. Next meeting, March 1. See Connie's full February meeting report in the CUE newsletter.
- Smart Phones: No January meeting, next meeting February 28.
- Mac, Windows: no report.

Special Committee

- Holiday Party: Paul Francis reported that the Elk's Club has been reserved for December 8, 2022, requiring a \$100 deposit which is refundable up until 30 days before the event.

Unfinished Business

- Member survey: Janice Castro reported that the survey is still in progress (checking out other survey tools).

New Business

- Nominating Committee: Conrad will appoint three Nominating Committee members to develop a slate of officers for next year.
- Future Meeting Presentations: There was a discussion concerning the topic of cutting the cord and streaming TV services. Tom was willing to do a presentation for the Erie area, but would not be ready until April. Paul reported that he would contact Rob Truman to see if he was available for March for an updated cutting the cord presentation.

Secretary's Report Continued

The meeting was adjourned at 7:19, and John Fair introduced speaker Bill James who spoke about Chromebooks.

Respectfully submitted,

A handwritten signature in black ink that reads "Susan B. Mueller". The script is cursive and fluid.

Susan B. Mueller, Secretary

C.

U.

E.

A Note from the Editor

As usual, feel free to contribute information for the CUE newsletter. Whether it is small, large, an article, a tip, information, or pictures, you can send it to me and I will plan to include it in the newsletter. You can reach me at grimcyber@yahoo.com.

Remember that you can find recent news at the CUE website (cuerie.com). At times, the website will have more recent news than the CUE newsletter since the website

is updated continuously and the newsletter is updated monthly.

In case you are wondering, based on recent articles, I do own an abacus, a rectangular slide rule, and a circular slide rule!

Stay Safe!

Editorially Speaking, Don Grim



PLEASE PRINT

**COMPUTER USERS OF ERIE
MEMBERSHIP APPLICATION**

Today's Date _____

Last Name	First Name
Address	
City, State	Zip
Home Phone	Cell Phone
Your Email	

The yearly dues are payable in August of each year. The dues are \$24 annual.

For NEW members only, when you join outside the annual cycle your initial dues are based upon the month you join. Follow the schedule below.

August \$24	September \$22	October \$20	November \$18
December \$16	January \$14	February \$12	March \$10
April \$8	May \$6	June \$4	July \$2

Information provided on this form will be placed into a CUE Membership Directory

What is your Computer or Device: (Circle)

Windows Mac Android iPhone iPad
Tablet Linux Other

What is your level of expertise? (Circle)

Novice I know some I want to learn more
Expert Geek

Send your completed application
to:

Computer Users of Erie

PO BOX 8941

Erie, Pa 16505-0941

What do you wish to gain by joining Computer Users of Erie?

Student membership is just \$15 per year (provide proof of student status)

CUE Officer Information

Officers

President	Conrad Sobczak	cjsob16511@hotmail.com	814-899-9699
Vice President	Paul Francis	pdfflyer@roadrunner.com	814-882-1175
Secretary	Susan Mueller	suepasta@roadrunner.com	814-622-1262
Treasurer	John Fair	johncfair@gmail.com	814-474-3055

At-Large Board

Janice Castro	jcastrocue@outlook.com	312-543-9128
Don Grim	grimcyber@yahoo.com	814-461-8289
Marcia Keller	dekmak43@gmail.com	814-449-4682
Hal Kelley	hal_kelley@outlook.com	814-836-1803
Suzanne Matthews	pdxmatthews@aol.com	814-790-4185

Alternate At-Large Board

Lou Cioccio	lcioccio@mac.com	814-868-1320
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Special Interest Groups

Beginner's (BUG)	Lou Cioccio	lcioccio@mac.com	814-868-1320
Digital Photo	Lou Cioccio	lcioccio@mac.com	814-868-1320
Genealogy	Susan Mueller	suepasta@roadrunner.com	814-622-1262
MAC	Lou Cioccio	lcioccio@mac.com	814-868-1320
Smartphone & Tablet	John Fair	johncfair@gmail.com	814-474-3055
Windows	Lou Cioccio	lcioccio@mac.com	814-868-1320

Other Resources:

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Editor	Don Grim	grimcyber@yahoo.com	814-461-8289
Membership Chair	John Fair	johncfair@gmail.com	814-474-3055
Webmaster	Tom Kuklinski	tkuklinski@gmail.com	814-746-9165

CUE Disclaimer

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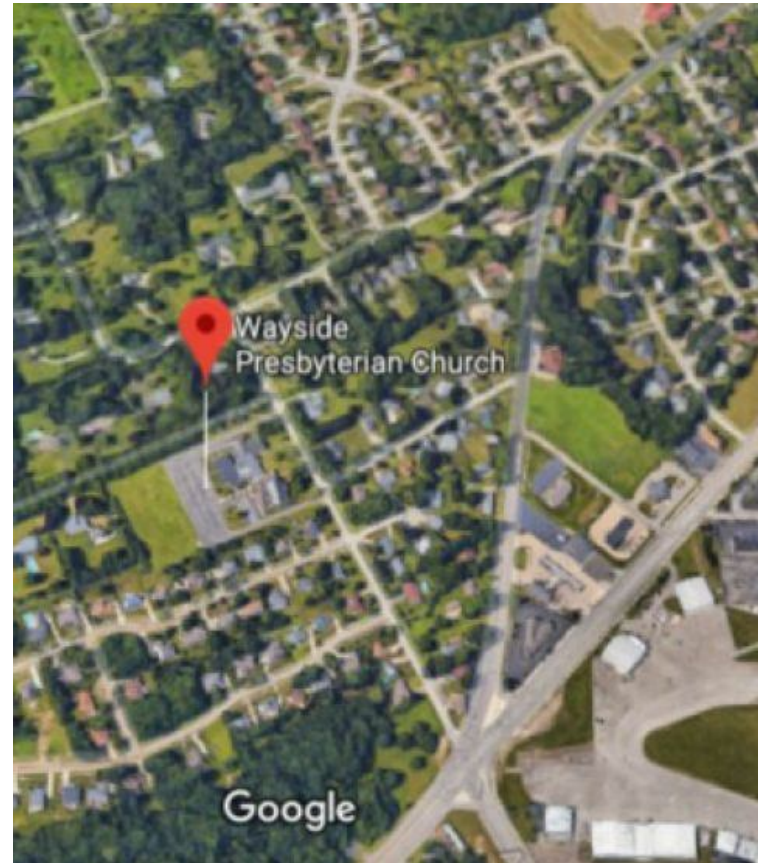
Directions to Wayside Presbyterian Church for CUE Meetings

Wayside Presbyterian Church, at 1208 Asbury Road, is approximately three blocks north of the intersection of Asbury Road and Route 5. This intersection is at the northwest corner of the Erie International Airport property. Following Asbury, turn left at the first marked driveway for the church. During the afternoon winter schedule (10:00 AM for the months of November, January, February and March), entry is through the two sets of blue double doors. Use the buzzer to gain entry if the doors are locked. During the normal evening schedule (7:00 PM the remaining months) use the double doors on the south side of the Christian Education wing. Signs are posted in the building to direct you to the meeting room.

From West of Erie International Airport: Follow Route 5 to the intersection of Asbury and Route 5. Turn hard left onto Asbury Road. Look for the church on the left approximately 3 blocks north of the intersection.

From South of Erie: Take Interstate 79 north to the 26th Street (Route 20) Exit. Bear left onto 26th Street (Route 20) west. Follow Route 20 about 3.4 miles west to Asbury Road. Turn right (at the Sheetz Gas Station) onto Asbury and follow it straight across Route 5. Look for the church on the left approximately 3 blocks north of the intersection.

From East of Erie International Airport: Follow 26th Street (Route 20) west to Asbury Road. Turn right onto Asbury and follow it straight across Route 5. Look for the church on the left approximately 3 blocks north of the intersection. OR, follow 12th Street (Route 5) west past the airport to Asbury Road. Turn right onto Asbury Road. Look for the church on the left approximately 3 blocks north of the intersection.



About the Newsletter

The CUE Newsletter is published monthly by the Computer Users of Erie (CUE), an independent nonprofit computer user group, dedicated to the education and support of our members. The opinions expressed herein are those of the individual authors or the editor, and do not necessarily reflect the opinions of CUE. This publication is Copyright © 2018 by the Computer Users of Erie. All rights reserved. Permission to reprint is hereby granted to any Nonprofit Organization, as long as proper credit is given, or not restricted by the original author or source. **Advertising:** Advertising is welcome from both our members and commercial sources. For current advertising rates, please send an email to the Editor requesting a copy of the Ad Rates file. **Address Changes:** Any recipient of the newsletter is urged to submit a change of address notification to the Editor, either via US Mail to the address shown below, or (preferably) via email, so we may keep our records accurate. **Newsletter Exchange:** CUE welcomes newsletters from other user groups. If you would like to exchange newsletters, either by US Mail or via electronic (Internet) delivery, please send your newsletter to the address listed below. We will add your name to our mailing list and send you our newsletter in return. **Submissions:** Submissions are always welcome from our members or outside sources. Submissions may be articles, images, cartoons, etc. For first time authors, please request a copy of our Submissions Guidelines from the Editor, prior to submitting any items. This will help to eliminate publication delays. Submissions are due by the 5th of each month. **Correspondence:** General correspondence to CUE may be sent via US Mail to: Computer Users of Erie, PO Box 8941, Erie, PA 16505-0941 USA. Email to: cuerie@gmail.com. Editor Email to: grimcyber@yahoo.com.

CUE Membership Benefits



As the largest computer users group in northwest Pennsylvania, CUE has served Erie and surrounding communities since 1982. CUE provides a forum for people to learn about computers and have fun doing so. The group meets the third Thursday each month, with the exception of the months of July and December. In July the group gathers for a picnic and December is the annual holiday party (dates vary). CUE meetings are at Wayside Presbyterian Church, 1205 Asbury Road, Erie. Meetings from April through October are at 7:00 p.m. From November through March, the meetings are at 10:00 AM in the morning, except it will stay at 7:00 p.m. during the Caronavirus Pandemic.

Our monthly meetings are open to the public regardless of age or ability. Many of our members are senior citizens who span a wide range of capabilities and interests but share a desire to know more about how to use computer related technology. Our role is to provide a forum for continuous learning from each other. CUE has a closed Google gmail group that is used to communicate with members and to post questions/problems to seek answers from the membership. Members pay an annual membership fee of \$24 to receive a membership directory, monthly newsletter, availability to monthly general meetings, and any of the Special Interest Group (SIGs) meetings, usually held in a member's home. Locations and times vary, so check the online EVENTS Calendar on the website for the latest information. SIG topics include:

- Digital photography [and photo safari]
- Genealogy
- Macintosh computers
- Computer troubleshooting
- Beginners users group (BUG)
- Handheld smartphones and tablets

CUE is a member of the Association of Personal Computer User Groups (APCUG). APCUG is an International, platform-independent, volunteer-run, non-profit organization devoted to helping member User Groups offer enhanced services to their members. Some of the membership benefits include:

- Speakers bureau
- Free virtual technology conferences
- Regional conference
- Push newsletter articles
- Discounts and special offers from vendors
- User group newsletters online

Find us online at <http://www.cuerie.com/>. And Facebook @cuerie

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