

Pittsburgh Computer Solutions 451 Valleybrook Road Suite 200 McMurray, PA 15317 724-942-1337

### 7 AWE-INSPIRING WOMEN OF COMPUTER ENGINEERING

Despite common assumptions, women formed the backbone of early computing and technology, which paved the way to modern computer science. Female programmers made up half of the industry's workforce in the beginning and until recently, these ladies went completely unrecognized for their accomplishments. They were never introduced, never received credit. Their inspirational stories have changed stereotypes and opened doors helping students see that technology careers lie within their grasp. Computing professionals know that their field's greatest computing pioneers included women and men!

Ada Lovelace (1815-1852) was present at the very genesis of computing. As the daughter of Lord Byron, she worked with Charles Babbage on his Difference Engine in the 1840s. She wrote what has been credited as the first computer code—before a computer even existed to run it! A hundred years later, that code influenced the development of computing as we know it today.

Hedy Lamarr (1914-2000) often better known as a Hollywood starlet, was an inventor and a pioneer in the field of communications technology. Hedy co -invented and patented the technology for frequency hopping which was important for controlling torpedoes. The system manipulated radio frequencies at irregular intervals to encode classified military messages. The applications of her invention made cell phones, fax machines, Bluetooth, and other wireless communications possible.

**Edith Clarke** (1883-1959) was the first woman to earn an electrical engineering degree from Massachusetts Institute of Technology (MIT). She was also the first female professor of electrical engineering at the University of Texas at Austin. Edith went on to become one of the best'known engineers of her era. She invented the Clarke calculator for which she had patented in 1925.



#### Awe-inspiring Women Continued

The simple graphical device could solve equations involving electric current, voltage and impedance in power transmission lines. It was a very speedy device that could solve line equations involving hyperbolic functions ten times faster than previous methods. From this point Edith went on to make a number of pioneering achievements in the field of electrical engineering, becoming known for "developing mathematical methods that simplified and reduced the work of electrical engineers", while doing much for women along the way.



**Grace Hopper** (1906-1992) Mathematician, US Navy rear admiral, Computer Scientist. As a pioneering computer scientist, along with her naval rank, she is sometimes referred to as "Amazing Grace" and known as the mother of computing. She was one of the first programmers of the Harvard Mark I computer. Grace developed the first computer compiler and the first computer programming language which helped revolutionize the world of computers. She is credited with coining the terms "bug" and "de-bug" as related to computer errors. One day a computer failure stumped Hopper and her team until she opened the machine and found a moth inside! Taping the moth into her log book, she wrote, "first actual bug found." The Cray XE6 "Hopper" supercomputer at the National Energy Research Scientific Computing Center, or NERSC, was named after her. Perserverance and knowledge are two traits that made her a great leader.

**Kathleen McNulty Antonelli** (1921-2006) an American computer programmer and one of the six original programmers of the ENIAC, the first general-purpose electronic digital computer. The ENIAC was a project run by the U.S. Army as part of a secret WWII project. They learned to program without programming languages or tools (for none existed) - only logical diagrams. Her contribution to the development of software computing and programmer is however infinite and will continue to live on through the technological developments of the 21st century. Kathleen paved the path to modern computer science.

**Jean E. Sammet** (1928-2017) An American computer scientist who developed the FORMAC, a programming language and system used for symbolic mathematics for IBM in the 1960s. Previously, she had managed software development for MOBIDIC, a computer made for the Army Signal Corps. at Sylvania Electric Products. She was also one of the developers of the influential COBOL programming language.

#### "Hidden Figures"

**Katherine Coleman Goble Johnson** - An African-American mathematician who made contributions to the United States' aeronautics and space programs with the early application of digital electronic computers at NASA. One of NASA's human 'computers', Katherine performed the complex calculations that enabled humans to successfully achieve space flight. She began working in aeronautics as a "computer" in 1952, and after the formation of NASA, she performed the calculations that sent astronauts into orbit in the early 1960s and to the moon in 1969. Johnson was honored with the Presidential Medal of Freedom in 2015, and saw her story brought to light through a book and the feature film "Hidden Figures" the following year. Mattel is releasing The Barbie inspiring Women Katherine Johnson doll on April 16, 2018.

# New Software Changes

Our goal at Pittsburgh Computer Solutions is to provide the best IT support, at better than market pricing. One way we do this is through investments in specialized software. We've recently purchased a new software package that gives us many more capabilities, at NO EXTRA COST to you. We are planning to deploy this software in the coming days/weeks. You and your staff will receive alerts to restart PC's and servers during installation transfers.

#### What you'll see:



If you have our Managed Anti-virus package, you'll see a new icon in your bottom right hand taskbar for "Webroot". Our new antivirus software will capture more potential threats and use less of your computer resources to prevent slowing down your machines.



If you have our standard monitoring package, you'll see our new Knights Helmet icon in the bottom right hand taskbar. Using the Knights Helmet icon; you'll be able to email us screenshots, create tickets, install printers, run quick automated cleanups, and much more.



You'll also see our remote access icon called Screen Connect in the bottom right hand taskbar.



The MaaS360 icon will appear for those with mobile device encryption on their cell phones and tablets. MaaS360 allows us to provide an enhanced interface for managing your devices and a more granular level of control.



For those with in-house Microsoft Exchange servers, we'll be shifting from our current solution MaxMail to the new solution called The Email Laundry. This will allow us more control over blocking and protecting your emails from spam/viruses. We'll work with you to get access to your new dashboard during the course of the transition. No downtime is expected for this transition.

#### This new software offers us many more tools to provide a better service experience.

If you have any questions or concerns about these changes, please feel free to reach out to Brandon Ansell by email: bansell@pcsmsp.com or by calling PCS at 724-942-1337.



## Google Great Tips for Web Searches

Use symbols or words in your search to make your search results more precise!

#### **Refine Web Searches**

Google Search usually ignores punctuation that isn't part of a search operator.

Don't put spaces between the symbol or word and your search term. A search for **site:nytimes.com** will work, but **site: nytimes.com** won't.

Here is a list of common search techniques that will help your search be more precise.

**Search social media** Put **@** in front of a word to search social media. For example **@twitter**.

Search for a price Put \$ in front of a number. For example: camera \$400

**Search hashtags** Put **#** in front of a word. For example: **#throwbackthursday**.

**Exclude words from your search** Put - in front of a word. For example, **jaguar speed -car** 

**Search for an exact match** Put a word or phrase inside quotes. For example, **"tallest building"**.

Search for wildcards or unknown words Put a \* in your word or phrase where you want to leave a placeholder. For example, "largest \* in the world".

Search within a range of numbers Put .. between each search query. For example, camera \$50..\$100.

**Combine searches** Put "OR" between each search query. For example, marathon OR race.

Search for a specific site Put "site:" in front of a site or domain. For example, site:youtube.com or site:.gov. Search for related sites Put "related:" in front of a web address you already know. For example, related:time.com. Get details about a site Put "info:" in front of the site address. See Google's cached version of a site Put "cache:" in front of the site address.



### There's Still Time!

The Grand Prize Drawing for participants in the Referral Program will be held in early Fall of 2018! There's still time to submit your referrals! Don't miss out on the fun and the chance to win the grand prize valued at \$500 or more!

Submit referrals to: shaas@pcsmsp.com or call 724-942-1337