

Annotated Bibliography

Primary Sources

American 105mm Howitzer M2A1 crew of Battery A, US 159th Field Artillery Battalion firing their weapon near Uirson, Korea, 24 August 1950. 24 Aug. 1950. Facebook, www.facebook.com/wrhstol/photos/a.335883526459919/1223976330983963/?type=3&theater. Accessed 18 Jan. 2020. This source is primary because it is an artifact of the time. I used this source on my website to demonstrate the problem of aiming missiles ENIAC combatted.

Bartik, Jean, et al. *Pioneer Programmer: Jean Jennings Bartik and the Computer That Changed the World*. Kirksville, Truman State UP, 2013. This source is primary because it is an autobiography. It is a wonderful recap of the story of Jean Bartik with her involvement with ENIAC as well as other projects.

Eckert, J. Prepsler, Jr. "J. Prepsler Talks on ENIAC One of World's Largest Computers." *Youtube*, 1985, www.youtube.com/watch?v=G8R6li54R20. Interview. This is a primary source because it is an interview with a contributor to ENIAC. This interview talked about some of the basics along with more complicated parts of ENIAC.

ENIAC in Use. *DocsTeach*, www.docsteach.org//images/documents/595506/orig_595506_1258.jpg. Accessed 14 Jan. 2020. This source is primary because it is from the time. It is a view of ENIAC being used.

ENIAC Programmers. *DocTeach*,

images.squarespace-cdn.com/content/v1/5be731be372b9641ca9c8a44/1563990197348-QZLAIU5HKQRB3ZC1KNXS/ke17ZwdGBToddI8pDm48kFKVd3odInFgUzLkoDWliLUUqsxRUqqbr1mOJYkfIPR7LoDQ9mXPOjoJoqy81S2I8N_N4V1vUb5AoIIbLZhVYxCRW4BPu10St3TBAUQYVKc3mGCn5pUevUWirp7c9lwfhYMx4voJq0tiHbZdAscmnSp7uNxwfZarj9P8sDkeKRQ/s02e670_ENIAC6.png?format=1500w. Accessed 14 Jan. 2020. This source is primary because it is from the time. This shows the six ENIAC programmers.

"ENIAC Programmers Kathleen 'Kay' (McNulty) Mauchly Antonelli, Jean 'Betty' (Jennings)

Bartik." *WITI*, 1997, www.witi.com/halloffame/298369/ENIAC-Programmers-Kathleen-/. Accessed 8 Dec. 2019. This source is secondary because it was created after ENIAC was built. I really began to learn about the ENIAC programmers from this page. This page does a good job addressing the successes of the programmers.

ENIAC Programmers Stand at Its Control Panels. 1946. *Computer History Museum*,

images.computerhistory.org/revonline/images/102618640-03-01.jpg?w=600. Accessed 17 Nov. 2019. This source is primary because it is a picture of ENIAC and its programmers at the time. This picture was the first time that I saw the ENIAC programmers.

ENIAC Women Programming. *Columbia University*, 27 Nov. 2019,

www.columbia.edu/cu/computinghistory/eniac1.html. Accessed 16 Dec. 2019. This source is secondary because it doesn't contain anything from the time. This source was used on my webpage. It expresses the era very well.

"Footage of the ENIAC at the Moore School of Engineering, 1946." *Youtube*, 14 Feb. 1946, www.youtube.com/watch?v=r2SCpzXqmP8. Accessed 25 Nov. 2019. Interview. This source is primary because it is footage from the time. This footage really shows the scale of ENIAC at the Moore School of engineering.

Kennedy, T. R., Jr. "Electronic Computer Flashes Answers, May Speed Engineering." *The New York Times*, 15 Feb. 1946. This is a primary source because it is a newspaper from the time. I used this source as a reference for learning about ENIAC. It really demonstrated the impact that ENIAC had on the world at the time.

Kleiman, Kathy. Interview. Conducted by James Dadabo, 20 Dec. 2019. This source is primary because it is an interview with Kathy Kleiman, an important figure in the recognition of the ENIAC Programmers. This interview is in depth and covers more specific information about the ENIAC. It also goes into depth with the theme of NHD this year, Breaking Barriers in History.

Maintenance Operator Changing Vacuum Tubes in ENIAC. 1950. *Computer History Museum*, images.computerhistory.org/revonline/images/500004289-03-01.jpg?w=600. Accessed 17 Nov. 2019. This source is primary because it is from the time. This picture shows the changing of a vacuum tube of ENIAC.

Photograph of ENIAC (Electronic Numerical Integrator and Calculator); ca. 1946; Records of the U.S. Information Agency, Record Group 306. [Online Version, <https://www.docsteach.org/documents/document/photograph-of-eniac-electronic-numerical-integrator-and-calculator>, December 16, 2019]

Secondary Sources

"ARL Computing History." *ARL Computing History / U.S. Army Research Laboratory*,

www.arl.army.mil/www/default.cfm?page=148. This source is secondary because it was made as a reference. This source as an archive of information to learn more accounts of the ENIAC story. In this source, I also learned about ARL's (BRL at the time) involvement with the computer.

De la Bédoyère, Guy. *The First Computers*. Milwaukee, World Almanac Library, 2006. This

source is secondary because is not from the time. It discusses early computers including the ENIAC.

"ENIAC." *ENIAC*, Computer History Museum, 1996,

www.computerhistory.org/revolution/birth-of-the-computer/4/78. This source was secondary because it was written significantly after ENIAC was built. It is a good reference for me to learn basic facts and get connected with questions that are more relevant to my research.

"ENIAC at Penn Engineering." *Penn Engineering*, 2017,

www.seas.upenn.edu/about/history-heritage/eniac/. This source is secondary because it is a celebration long after ENIAC. It was where I originally founded out where ENIAC was built.

"Girl Computers." *American Heritage*, American Heritage Publishing, 2011,

www.americanheritage.com/girl-computers#3. Accessed 19 Jan. 2020. This is a secondary source due to it being written significantly after ENIAC. In this article, great depth about the programmer's background as members of the Pennsylvania Computing

Section is given. The source also covers further uses of the computer such as calculating the feasibility of a hydrogen bomb.

Jones, Brad. "Remembering ENIAC, and the Women Who Programmed It." *Digital Trends*, Digital Trends, 26 Nov. 2019, www.digitaltrends.com/computing/remembering-eniac-and-the-women-who-programmed-it/. This source is secondary because it is modern.

Kleiman, Kathy, director. *The Computer: The Remarkable Story of the ENIAC Programmers*. *ENIAC Programmers Project*, First Byte Productions, eniacprogrammers.org/see-the-film/. Accessed 25 Nov. 2019. This source is secondary because was not made during ENIAC's prime. I learned a lot about Kathy Kleiman from this documentary. Kathy has connected me with more primary sources and exclusive interviews.

Levy, Steven. "The Brief History of the ENIAC Computer." *Smithsonian.com*, Nov. 2013, www.smithsonianmag.com/history/the-brief-history-of-the-eniac-computer-3889120/. Accessed 12 Nov. 2019. This is a secondary source because it is a recognition of ENIAC long after its building. This is an overview of ENIAC for the eyes of the public according to the Smithsonian Magazine.

Lohr, Steve. *Digital Revolutionaries: The Men and Women Who Brought Computing to Life*. New York, Rb Flash Point, 2009. This source is secondary because it is not a piece of the time. This book covers a wide range of people quintessential to modern computers. It also talks about the first modern programmers (ENIAC).

Martin, C. Dianne. "ENIAC: The Press Conference That Shook the World." *IEEE Technology and Society Magazine*, www2.seas.gwu.edu/~mfeldman/csci110/summer08/eniac2.pdf.

Accessed Dec. 1995. This source is secondary because it is not from the time. It is more specifically covering the after-effects of ENIAC and its impact.

McCartney, Scott. *ENIAC: The Triumphs and Tragedies of the World's First Computer*. Berkley trade pbk. ed., New York, Berkley Books, 2001. This source is primary because it is from the time. This book is a general recap of the ENIAC but in incredible detail.

"MIT Program." *Lemelson*, lemelson.mit.edu/resources/john-mauchly-j-presper-eckert. This source is secondary because it is not from the era. This is a good primer for information about the engineers.

Reed, Jennifer. *Computer Scientist Jean Bartik*. Minneapolis, Lerner Publications, 2017. This source is primary because it is a newer book about historic events. It covers Jean Bartik's involvement with ENIAC but also extends with her involvement in other projects.

"A Science Odyssey: People and Discoveries: ENIAC Is Built." *PBS*, Public Broadcasting Service, www.pbs.org/wgbh/aso/databank/entries/dt45en.html. This source is secondary because it is a more modern part of ENIAC. This talks about the engineers but less about the programmers.

Sosa, Estanislao Navarro. "Electron Tube." *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., 15 July 2013, www.britannica.com/technology/electron-tube. This source is secondary because it is an overview of vacuum tubes from a modern stance. This source explains the purposes of vacuum tubes and how they work.

Swaine, Michael R., and Paul A. Freiberger. "ENIAC." *Encyclopædia Britannica*, 26 Oct. 2018, www.britannica.com/technology/ENIAC. Accessed 11 Nov. 2019. This source is secondary because it is an overview of ENIAC. It doesn't go into depth about ENIAC's programmers.

Vare, Ethlie Ann, and Greg Ptacek. *Patently Female: From AZT to TV Dinners, Stories of Women Inventors and Their Breakthrough Ideas*. New York, Wiley, 2002. This source is secondary because it is a new recollection of women from history. This is where I originally learned about the ENIAC programmers.

Weik, Martin H. "The ENIAC Story." *The ENIAC Story*, 1961, ftp.arl.army.mil/~mike/comphist/eniac-story.html. This is secondary because it is not from the time. This covers the story of the engineers. It also discusses some semi-specific details of the ENIAC.

Weiss, Todd R. "ENIAC Still Influencing Enterprise IT 68 Years Later." *CIO*, IDG Communications, 28 July 2011, www.cio.com/article/2405858/eniac-still-influencing-enterprise-it-68-years-later.html. This is secondary because it is not an account of ENIAC from the time. It is discussing how ENIAC is built.

"What Is ENIAC (Electronic Numerical Integrator and Calculator)?" *Computer Hope*, 22 May 2018, www.computerhope.com/jargon/e/eniac.htm. This source is secondary because it is not from the time. It covers how ENIAC still affects modern technology.

Uncategorized Sources

ENIAC Wiring Diagram. www.columbia.edu/cu/computinghistory/eniac-program.gif. Accessed 21 Jan. 2020. This source is primary because it is from the time. It is a wiring diagram from the ENIAC.

Jean Bartik Fellowship Award. *ENIAC Programmers Project*, First Byte Productions, eniacprogrammers.org/wp-content/uploads/2014/05/computer-fellows-award-jean-bartik.png. Accessed 21 Jan. 2020. This source is primary because it is a picture from the time. It demonstrates the late recognition of the ENIAC programmer, Jean Bartik.

Kathy Kleiman. *ENIAC Programmers Project*, First Byte Productions, eniacprogrammers.org/wp-content/uploads/2014/05/kathy_kleiman.png. This source is primary because it is a picture of ENIAC. I used this picture to show who Kathy Kleiman is to my audience.