

**Ada Lovelace,* The Enchantress of Computing:
Exploring the Beginnings of the Information Evolution**

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Individual Website

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Given the overwhelming majority of men in computer science and the general trend in science and math history, I was surprised to find that the first computer programmer was a woman, Ada Lovelace. I chanced upon Lovelace while reading that Alan Turing, a famous pioneer of artificial intelligence, had referenced Lovelace's work as he developed his own ideas in the early 1900s, nearly a century after hers. With research, I found that her trailblazing work interwove the arts and the sciences and challenged the low intellectual expectations of society for women in the 19th century. I chose Lovelace as my focus because her prescient interdisciplinary work explored a new science, computer programming, almost a century before the information revolution.

I started research online for a general idea of Lovelace's early technological creations. After reading several articles, I found more detailed sources at the Central Library of Houston and Rice University through *WorldCat*, a library database. At Rice University, I read MicroFiche forms and academic journals from its school database. After looking at a source, I usually found a lead for another source, and my hunt continued. *Ada Byron Lovelace: The Lady and the Computer* led me directly to a phone interview with Mary Dodson Wade, its author. A comment on a *Nature* article took me to its author Dr. Kathleen Taylor, a scientific writer published by a major university, whom I interviewed through email about her experience with gender bias. With all of my research, I uncovered many vices and personal shortcomings of Lovelace. However, I did not focus my research nor my website on these topics because I did not want them to overshadow her work on the Analytical Engine. I still made sure to deliver a balanced website by including different perspectives and thoroughly analyzing primary sources.

I thought a website was the most appropriate medium to present a project about computer programming. A website was interactive and showcased the documents, videos, and images I analyzed to support my thesis. I even embedded code from a website that added zoom features to some of my website pictures. As I built my website, I devoted as much time to its aesthetics as its content because it seemed characteristic of Lovelace, who appreciated the humanities as much as she enjoyed mathematics and science.

Before even the 20th century, Lovelace explored the of the Analytical Engine, and she declared its potential as a general purpose computer that could do any task it was programmed to do, including create music. During her life, Lovelace encountered discouraging misogynist views. However, Lovelace continued her scientific explorations and initiated an exchange of ideas between the sciences and the liberal arts, disciplines generally thought to be the antithesis of each other, with her predictions about the artistic capabilities of general purpose computers. Her predictions have manifested in mp3s, JPEGs, and iPods. Lovelace stands as an interdisciplinary technological visionary today, in an era that encourages women to unapologetically join the thrills of mathematics and science.