# **WOMEN IN COMPUTING**



### REMARKABLE WOMEN AND THEIR CONTRIBUTIONS TO COMPUTING:

REVOLUTION: CALCULATORS



#### Ada. Countess of Lovelace

Lovelace is known for a remarkable paper, "Sketch of the Analytical Engine Invented by Charles
Babbage," published in 1843. It contains visionary insights into the challenges of using computers and their potential for inventive and creative work.

REVOLUTION: BIRTH OF THE COMPUTER



#### **ENIAC Programmers**

The ENIAC was the first large-scale electronic computer in the United States. Its hundreds of cables and switches were programmed by six young women, including Kay Antonelli, Jean Bartik, Betty Holberton, Mariyln Meltzer, Frances Spence, and Ruth Teitelbaum.

REVOLUTION: EARLY COMPUTER COMPANIES



#### **Grace Hopper**

Hopper worked on some of the earliest computers and developed advanced software programs. She developed an early compiler, a program to help write other programs, and was involved in the development of the COBOL programming language.

Women have played a crucial role in the history of computing at many levels, from programming and engineering to marketing, business, and leadership. These pioneers influenced the design and programming of some of the first computers and languages, and laid the groundwork for women's expanding involvement in technology and business. This tour features nine remarkable women in the history of computing.

REVOLUTION: SUPER COMPUTERS



#### Fran Allen

Allen is a computer software pioneer. She developed advanced compilers for making computers work faster and more efficiently, including for the 1961 IBM "Stretch," one of the first and most complex supercomputers ever designed.

REVOLUTION: MAINFRAMES



#### **Margaret Hamilton**

NASA software chief Margaret Hamilton led development of the code for the Apollo space mission to put a man on the Moon in 1969. REVOLUTION: DIGITAL LOGIC



#### Sophie Wilson

Wilson, along with Steven Furber, designed the ARM 1 microprocessor in 1985. This design evolved into one of the most successful computer architectures of all time and has become the basis for thousands of electronic products.

REVOLUTION: INPUT & OUTPUT



## Adele Goldberg

Goldberg contributed to the development of the Smalltalk-80 programming language and other object-oriented programming systems at Xerox PARC in the 1970s. Her work was in part the basis for graphical user interfaces, used in most computers today.

REVOLUTION: MOBILE COMPUTING



## Donna Dubinsky

Dubinsky was the founding CEO of Palm Computing. She was part of the team that developed the PalmPilot, the first commercially successful handheld connected organizer, which pioneered seamless synchronization with the PC and a writing system known as "graffiti."

REVOLUTION: NETWORKING & THE WER



## **Ginny Strazisar**

Strazisar co-wrote the first Internet router software for the then-new ARPANET network, based upon TCP/IP protocols. These protocols form the basis of today's Internet. Strazisar's work allowed her company, BBN, to produce the first commercial Internet router.

