GRACE HOPPER

Rear Admiral Grace Hopper was an early and influential software engineer. She is best known for her trailblazing contributions to computer programming, software development and the design and implementation of programming languages.

Early life

Grace Brewster Murray was born in New York City on December 9, 1906, and was the eldest of three children and was educated in private schools. Attending Vassar College, she graduated Phi Beta Kappa with a bachelor's degree in mathematics and physics in 1928. Hopper had hoped to follow in her grandmother's footsteps and become an engineer however she realised that there was no place for women in engineering and instead decided to pursue an academic career in mathematics.

She proceeded to Yale University and completed her MA and PhD in mathematics. During this time she married Vincent Foster Hopper, taking his name and becoming Grace Hopper, a name she kept even after their divorce in 1945. In 1931, she joined the Vassar faculty as an associate professor. Hopper devoted the following twelve years teaching at Vassar. Later in life, Hopper said her most important accomplishment, other than building the compiler, was "training young people" (Coding Bootcamp | The Grace Hopper Program, 2020).

After the bombing of Pearl harbour and the United States' entry into WW2, Hopper decided it was time to serve her country. She tried to enlist in the Navy but was rejected several times and at the age of 34, she was deemed too old. However she was finally accepted in Women Accepted for Volunteer Emergency Service (WAVES) programme. Hopper joined the U.S. Naval Reserve (Women's Reserve) in December 1943. After being commissioned as a lieutenant, she was assigned to the Bureau of Ships Computation Project at Harvard University due to her extensive background in mathematics. There she programmed one of the first program-controlled computers ever built; the Navy's electromechanical Automatic Sequence Controlled Calculator. The behemoth (55 feet long, 8 feet high) is known to the world as the Mark I computer.

<u>Citations:</u>

The Grace Hopper Program. 2020. *Coding Bootcamp | The Grace Hopper Program*. [online] Available at: <https://www.gracehopper.com/8-facts-about-grace-hopper> [Accessed 4 November 2020].