

Generations of STEM: Grace Hopper

Computer Scientist & US Navy Rear Admiral

Sometimes referred to as “Amazing Grace,” Grace Hopper earned degrees in mathematics, receiving her doctorate from Yale. She took a leave of absence from teaching at Vassar to join the U.S. Naval Reserves (WAVES) and was later assigned to the Bureau of Ships Computation Project at Harvard University. There she worked on the Mark I computer programming staff.



Grace continued her work on computers, working on the UNIVAC I and II, and developing new ways for computers to code. This included the first compiler, translating mathematical code into a way for the computer to use it. She also developed coding with words, not just math, broadening access to technology. Grace participated in a development conference leading to the adoption of COBOL across industries. Another of her claims to fame resides in the Smithsonian: When the Mark II malfunctioned, she and her colleague dismantled the machine only to find a moth inside. They taped the “bug” to their logbook, now in the Museum. Thus, the term “bug” was born, as well as “debugging” a machine. Grace remained on active duty in the Navy for nineteen years and was awarded the National Medal of Technology in 1991. She is buried in Arlington National Cemetery.

Image Source: [Wikipedia, Lynn Gilbert](#) Information Sources: [YaleNews](#), [Yale University](#), [National Women's History Museum](#)