RIVERSIDE SWENEXT

INSPIRED BY GRACE HOPPER

WHO IS GRACE?

Grace Hopper was a leading figure in computer science and served as a naval officer. Her contributions to programming languages continues to make an impact on computer science today!

KICKING OFF HER CAREER

After receiving her undergraduate degree from Vassar College, Grace went to Yale for her Master's and PhD in math. When the U.S. got involved in World War II, she sought to join the navy and make an impact on her country through computing.

In 1943, Grace joined the U.S. Naval Reserve and worked on the Bureau of Ships' Computation project. In her newfound role, she became one of the first three programmers through her work on the Mark I computer!

MAKING IT BIG

In the Harvard lab, Grace developed crucial technologies for the army. By 1946, she left active service and joined the private sector. Some of the most influential programming concepts were established by her!

Her team created the first compiler that allowed the same code to work across different computers, developed the first word-based programming language, and contributed to the rise of the COBOL language!

IMPROVING AI

Have you ever heard of the term "debugging code?" It comes from Grace! After discovering a moth in her computer, she referred to the issue as a "bug" and the process as "debugging." From a young age, her attention to detail was admirable. As Artificial Intelligence becomes increasingly complex, Dr. Hopper would be the one to solve its own "bugs." Her commitment to the advancement of programming continues to be valued today.

STUDYING THE BLOCKCHAIN

The blockchain is a new way of distributing information digitally. As one "block" is compiled with data, it will fill up and link to another chain, and then another, and then another! This complex new technology will certainly impact the way future information is stored. Dr. Hopper will help expand the new field by improving its usability and ease of use for consumers. Her experience in developing human-oriented programming languages can help make sense of complex technologies like the blockchain.

ADVANCING QUANTUM COMPUTING

Quantum computing will change the world. Programs that take a regular computer a week to complete can take just *one second* with a quantum computer. Harnessing both the powers of physics and computer science, this powerful new technology can achieve feats that regular computers can't do. Just like Grace Hopper's work in developing coding languages, she would certainly contribute to programming quantum computers.

SOURCES

Yale News

IBM

The National Women's History Museum