

Frances E. Allen

CAPSULE INTRODUCTION
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Fran Allen의 소개는 Turing Award 를 받았을 때, IBM 웹사이트에 나온 그녀의 소개로 대신한다.

IBM Fellow becomes first woman to receive A. M. Turing Award

Frances Allen, a former high school math teacher, has become the first woman who will receive the prestigious Turing Award for her achievements in optimizing computer programs and high-performance computing systems. She was also instrumental to the work of the precursor to the U.S. National Security Agency in its code-breaking activities during the Cold War.

The announcement of the award was made by the Association for Computing Machinery in New York City, which since 1966 has awarded the prize in honor of Alan M. Turing, considered one of the “fathers” of modern computing.

Fran Allen taught high school math for two years in northern New York State in the mid-1950s, before she went on to earn a master’s degree in mathematics and join IBM’s famous research organization in 1957, to teach FORTRAN. Three decades later, in 1989, she became the first woman IBM Fellow in recognition of her leadership at the company and, by extension, the wider world of computing. She was also named a Fellow of the Association for Computing Machinery in 1994.

“Fran Allen’s work has led to remarkable advances in compiler design and machine architecture that are at the foundation of modern high-performance computing,” said Ruzena Bajcsy, chair of ACM’s Turing Award Committee and professor of Electrical and Engineering and Computer Science at the University of California, Berkeley. “Her contributions have spanned most of the history of computer science, and have made possible computing techniques that we rely on today in business and technology. It is interesting to note Allen’s role in highly secret intelligence work on security codes for the organization now known as the National Security Agency, since it was Alan Turing, the namesake of this prestigious award, who devised techniques to help break the German codes during World War II,” said Bajcsy, who is Emeritus Director of the Center for Information Technology Research in the Interest of Society (CITRIS) at Berkeley.

Allen initially joined IBM merely to pay off her tuition. “I only intended to stay long enough to pay my debt, because I loved teaching high school mathematics and I was going to go back,” Allen said a few years ago. Fortunately for IBM-and for the science of computing-the lure of “doing math” equaled the attraction of teaching it.