## **IEEE** Milestones

IEEE Milestones are recognition of achievements that cover over two centuries of innovation.

This year, the <u>IEEE History Center</u> recognized the **BASIC Programming Language** created in 1964 at Dartmouth College.



Beginner's All-purpose Symbolic Instruction Code (BASIC) had syntax that anyone can learn quickly. During the mid-1970s and 1980s, BASIC was the principal programming language used on early microcomputers. Its simplicity and wide acceptance made it useful in fields beyond science and mathematics, and enabled more people to harness the power of computation.

Prof. David Kotz, IEEE Fellow, with BASIC Milestone, Feb 2021

This is the first programming language whose design philosophy emphasized the ease of use. John G. Kemeny and Thomas E. Kurtz designed the original BASIC to enable students in fields other than science and mathematics to use computers. At the time, nearly all use of computers required writing custom software, which was something only scientists and mathematicians tended to learn. Due to its easy of use, BASIC helped nurture usher a new wave of computer professional such as Steve Wozniak and Bill Gates who built their silicon empires on BASIC.

Dartmouth College created two videos in 2014: Birth of BASIC, BASIC at 50

In 2015, the milestone, **Interactive Video Games**, was dedicated at BAE Systems' Canal St. facility in Nashua.

The "Brown Box" console, developed at Sanders Associates – later BAE Systems – between 1966 and 1968, was the first interactive video game system to use an ordinary home television set. This groundbreaking device and the production-engineered version Magnavox Odyssey game system (1972) spawned the commercialization of interactive console video games, which became a multi-billion dollar industry.

<u>Ralph Baer</u> started development of the "Brown Box" console video game system and several other prototypes in 1966. Baer is considered the "father of video games" and for a time it was Sanders' most profitable line. Baer's groundbreaking and pioneering work spawned the commercialization of interactive video games.



Interactive Video Games dedication ceremony at BAE Systems on 21 September 2015. From left to right: Dr. Arthur Molella, Dr. Jason Hui, James Henderson, Dr. Howard Michel, Ron Tabroff, Edward Nelson, James Anderson, and Thomas Perkins.