# Frederick P. Brooks, Jr.

Born April 19, 1931, Durham, N.C; discoverer of the bottomless software tar pit and debunker of the concept of the Mythical Man-Month in his book of the same title, developer of 'OS/360.



*Education:* AB, Duke University, 1953; SM, Harvard University, 1955; PhD, applied mathematics, Harvard University, 1956.

Professional Experience: IBM Corp., 1956-1965: associate engineer, Production Development Laboratory, 1956, staff engineer, 1956-1958, advanced systems planner, 1958-1959, member, research staff, 1959-1960, systems planning manager, 1960-1961, corporate processor manager and System/360 manager, 1961-1964, Operating System/360 manager, 1964-1965; University of North Carolina, 1964-present: professor, 1964-1980, Kenan Professor and chairman, Department of Computer Science, 1980-present.

Honors and Awards: IEEE W.W. McDowell Award, 1970; Computer Science Award, DPMA, 1970; IEEE Computer Society Pioneer Award, 1980; National Medal of Technology, 1985; ACM Distinguished Service Award, 1987; AFIPS Harry Goode Award, 1989; IEEE John von Neumann Medal, 1993.

From project inception in late 1961 to near announcement in April 1964, Fred Brooks was the project manager for the IBM System/360. After February 1964 he managed development of OS/360 during the first two years that were to ensue before delivery of that operating system's initial version. He then left IBM to accept a professorship in computer science at the University of North Carolina. In 1985, B.O. "Bo" Evans, Fred Brooks, and Eric Bloch received the National Medal of Technology at a White House ceremony for their work in developing the IBM System/360, described as "revolutionizing the industry." The 1989 Harry Goode Award citation reveals Brook's versatility: "For lasting contributions to computer science education to interactive 3-D computer graphics, and to hardware and software architecture in the development of the IBM System/360 series."

#### **QUOTATIONS**

"I believe the hard part of building software to be the specification, design, and testing of this conceptual construct, not the labor of representing it and testing the fidelity of the representation." (Brooks 1987)

<sup>&</sup>lt;sup>1</sup> From Pugh, Emerson W., Lyle R. Johnson, and John H. Palmer, IBMs 360 and Early 370 System, MIT Press, Cambridge, Mass., 1991.

"The tar pit of software engineering will continue to be sticky for a long time to come." (Brooks 1975)

### **BIBLIOGRAPHY**

## Biographical

Brooks, Frederick Jr., et al., "Discussion of the SPREAD Report," *Ann. Hist. Comp.*, Vol. 5, No. 1, 1983, pp. 27-44.

### **Significant Publications**

Brooks, Frederick P., Jr., The Mythical Man-Month: Essays on Software Engineering, Addison-Wesley, Reading, Mass., 1975.

Brooks, Frederick P., Jr., "No Silver Bullet," Computer, Apr. 1987, p. 11.

### **UPDATES**

Portrait replaced, MRW, 2012.