



NAVAL Postgraduate School

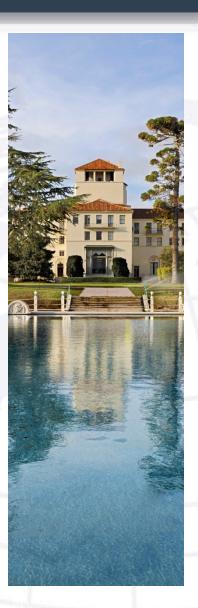
"Gary Kildall Conference Room" Dedication Ceremony

21 April 2017



Agenda

- Welcome
- Introductions
- Highlights
- Remarks
 - Peter Denning, Chair, Computer Science Department, NPS
 - Brian Berg, IEEE Region 6 Milestone Coordinator
 - David Laws, Computer History Museum Semiconductor Curator
 - Gordon Eubanks, 1976 NPS Graduate, MS Computer Science
 - Kristin Kildall, daughter, on behalf of the family
 - Ronald Route, President, NPS
- IEEE Milestone Presentation
- Prayer of Dedication
- Conference Room Dedication



IEEE = The Institute of Electrical and Electronics Engineers



Dr. Gary A. Kildall

19 May 1942 (Seattle, WA) - 11 July 1994 (Monterey, CA)

Dr. Gary A. Kildall was drafted into the U.S. Army in 1967, but joined the U.S. Naval Reserves instead, attending Officer Candidate School in Newport, RI in the summers of 1967 and 1968, then commissioned an Ensign in 1969 with a 3-year active duty service obligation as an Instructor at the Naval Postgraduate School from 1969-1972. Upon leaving the service, Gary remained at NPS as a professor in the Computer Science Department from 1972-1979.

While on the faculty, he writes and creates the first working prototype for the ground-breaking operating system CP/M (Control Program for Microcomputers) in 1974. Together with his invention of BIOS (Basic Input Output System), his simple operating system language allowed a microprocessor-based computer to communicate with a disk storage unit and provided an important foundation for the personal computer revolution. His NPS students were among the first in the world to experiment with microprocessor systems.



Gary Kildall at the Naval Postgraduate School

NAVAL POSTGRADUATE SCHOOL **DEPARTMENT OF MATHEMATICS** WALTER JENNINGS Professor of Mathematics (1947); ... Ohio State Univ., 1932; B.S., 1932; M. ROBERT EUGENE GASKELL, Professor of Mathematics Chairman (1966)*; A.B., Albion College, 1933; M.S. Juv. GARY ARLEN KILDALL, Lieutenant (junior grade), U.S. of Michigan, 1934; Ph.D., 1940. Naval Reserve; Instructor of Mathematics (1969); B.S., HORACE CROOKHAM AYRES, Professor Emeritus Univ. of Washington, 1967; M.S., 1968. UNO ROBERT KODRES, Associate Professor of Mathema B.S., Univ. of Washington, 1931; M.S., 1931; Ph.D., Univ. of California at Berkeley, 1936. (1963); B.A., Wartburg College, 1954: 14.6 ALADUKE BOYD MEWBORN, Professor Emeritus and Distinguished Professor (1946); B.S., Univ. of Arizona, 1927; LADIS DANIEL KOVACH, Professor of Mathematics (1967); M.S., 1931: Ph.D., California Institute of Technology, B.S., Case Institute of Technology, 1936; M.S., 1948; M.S., Western Reserve Univ., 1940; Ph.D., Purdue Univ., CHARLES HENRY RAWLINS, JR., Professor Emeritus (1922); Ph.B., Dickinson College, 1910; M.A., 1913; BYRON LEWIS KOLITZ, Licutenant, U.S. Naval Reserve; Ph.D., Johns Hopkins Univ., 1916. Instructor of Mathematics (1969): B.A., Vanderbilt Univ., M.S., Univ. of Florida, 1966. GERALD LEONARD BARKSDALE, JR., Assistant Professor of Mathematics (1967); B.S., Rice Univ., 1965; M.S., LEE GEORGE LITZLER, Licutenant (junior grade), U.S. Naval Reserve; Instructor in Mathematics (1969); B.A., Univ. of Texas 1967; M.S., 1969. ALAN PAUL BENDER, Ensign; U.S. Naval Reserve; Instructor of Mathematics (1969); B.A., Univ. of Minnesota, KI-NNETH ROBERT LUCAS. Associate Professor of Mathematics (1958); B.S., Washburn, Univ., 1949; Ph.D., Kansas 1967: M.S., 1968. WILLARD EVAN BLEICK, Professor of Mathematics (1946): M.E., Stevens Institute of Technology, 1929; Ph.D., Johns HERMAN BERNHARD MARKS. Associate Professor of

"Gary had been a military faculty member in Math and then returned as a civilian. He was one of five faculty who were hired into the newly formed NPS CS Department in the early 1970's. He was the only one to be granted tenure.... Gary was an outstanding teacher and an even better thesis advisor. In 1977 he was the only faculty member with a PhD in CS and he had taught a wide variety of courses. He was of course one of the best early pioneers on the use of microcomputers for both civilian and military uses. The MS thesis work he guided was groundbreaking. Gary was clearly my best faculty member... In summary, he had a distinguished NPS career as a naval officer, teacher, and researcher."

-- Gordon H. Bradley, Chair, CS Department, 1977-1982

Univ. of Utah, 1958; Ph.D., 1961.

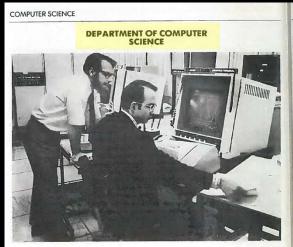
TOKE JAYACHANDRAN, Associate Professor of Mathematics (1967); B.S., V.R. College, Nellore India, 1951; M.S., Univ. of Wyorning, 1962; Ph.D., Case Institute of Technology, 1967 U.S. Navy; instructor of mathematics (1969); B.A., Plianti Univ., 1961: M.S., Naval Postgraduate School, 1968.

THOMAS HOLLISTER SOUTHARD, Visiting Professor of Mathematics (1969); B.A., Ohio State Univ., 1932; M.A., 1933; Ph.D., 1936.

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Lieutenant (JG) Gary Kildall, 1969-1972

Assigned as an Instructor in the Department of Mathematics, Ingersoll Hall (NPS Catalogue, 1970-1972)



Computer Laboratory on the fifth deck of Spanagel Hall.

Gordon Hoover Bradley, Professor of Computer Science; Chairman (1973)*; B.S., Lehigh Univ., 1962; M.S., 1964; Ph.D., Northwestern Univ., 1967.

Gerald Gerard Brown, Associate Professor of Operations Research and Computer Science (1973); B.A., California State Univ. at Fullerton, 1968; M.B.A., 1969; Ph.D., Univ. of California at Los Angeles, 1974.

Franklin Burkhead, Lieutenant Commander, U.S. Navy; Instructor in Computer Science (1977); B.S., U.S. Naval Academy, 1966; M.S., Naval Postgraduate School, 1977.

Richard Wesley Hamming, Adjunct Professor of Computer Science (1976); B.S., Univ. of Chicago, 1937, M.S., Univ. of Nebraska, 1939; Ph.D., Univ. of Illinois 1942. Stephen Trygve Holl, Lieutenant Commander, U.S. Navy; Assistant Professor of Computer Science (1976); B.S. U.S. Naval Academy, 1967; Ph.D., The John Hopkins Univ., 1974.

Cynthia Emberson Irvine, Adjunct Research Instructor (1975); B.A. Rice Univ., 1979. Ph.B. Cocc Western Disserve Univ., 1975.

Gary Arlen Kildall, Associate Professor of Computer Science and Mathematics (1972); B.S. Univ. of Washington, 1967; M.S., 1968; Ph.D., 1972.

Uno Ross. Kadres, Associate Toressor of Mathematics and Computer Science (1963); B.A., Wartburg College, 1954; M.S., Iowa State Univ., 1956; Ph.D., 1958.

Robert Steele McCormack, Lieutenant

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Associate Professor Gary Kildall, 1972-1979

Assigned to the Computer Science Group, then later received a joint appointment to both the Department of Computer Science and the Department of Mathematics, Spanagel Hall (NPS Catalog, 1978-1979)

*Note: Gary advised 28 student theses during his 10-year career at NPS

Gary Kildall and Dorothy McEwen Early Family Photos



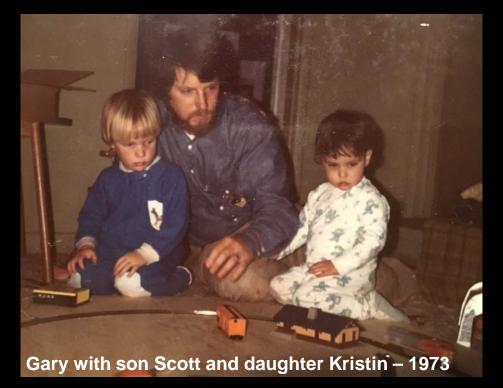
Gary and Dorothy at High School Prom – 1961



U.S. Navy Ensign Gary Kildall, Dorothy, and son Scott soon after arriving at the Naval Postgraduate School in 1969

(picture taken near Lover's Point along Ocean View Boulevard)

Gary Kildall Early Family Photos









Kildall Family Residence





In 1974, Gary worked in the garage/converted tool shed office behind his Pacific Grove home where he developed and wrote the first version of CP/M – the first personal computer operating system

In 1977, Bill Gates visited Gary at this house and stayed the night to discuss where Bill should relocate his Microsoft Company, currently in Albuquerque, NM; Although the Monterey Peninsula was discussed, Microsoft was moved to Redmond, WA



781 Bayview Avenue, Pacific Grove, California



Digital Research, Inc. (DRI)

- 1976: DRI co-founded by Gary Kildall and Dorothy McEwen (Kildall)
- 1977: Gary and Dorothy rent their first office space at 716 Lighthouse Avenue and begin marketing CP/M for \$70 to computer hobbyists
- First large software company in the micro-computer world



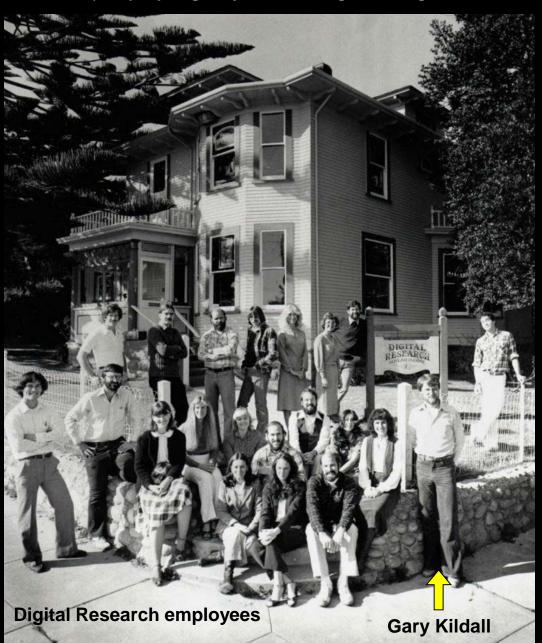
- 1978: The DRI Company Headquarters moved to its new home at 801 Lighthouse Avenue
- 1980: The Company expanded to 734 Lighthouse Avenue housed the DRI Engineer team
- 1982: DRI established its final location at 160 Central Avenue with 200 employees





Digital Research, Inc. Company Headquarters

(company originally named Intergalactic Digital Research, but soon renamed Digital Research, Inc.)







All photos circa 1978-1980

Digital Research, Inc. Company Headquarters



Photo is 2017 present day

Digital Research, Inc. Company Headquarters



801 Lighthouse Avenue, Pacific Grove, California

Photo is 2017 present day

Early Digital Research, Inc. Documents

INTERESTED IN FLOPPY DISKS?

CP/M is a low-cost control program for microcomputers which brings together recent advances in computer and peripheral technology. CP/M is an advanced disk operating system designed for use with IBM-compatible diskette-based computer systems which employ the Intel 8080 microcomputer. Previously available only to OEM's, CP/M has been in existence for over two years in various manufacturers' products, and has undergone extensive field testing. The functions of this software package include named dynamic files, program editing, assembly, debugging, batch processing, and instantaneous program loading, resulting in facilities similar to popular timesharing services. CP/M is adaptable to any 8080-based computer system with a minimum of 16K of main memory and one or two IBM-compatible disk drives. Find out about CP/M:

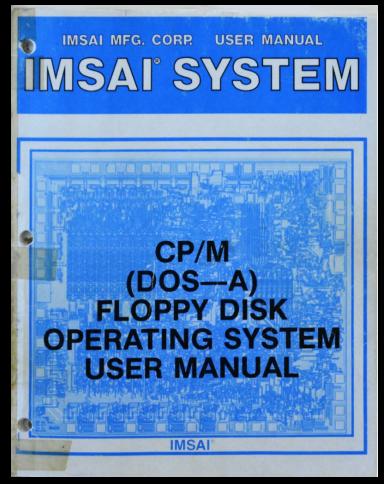
- □ Send me the price list and free brochure describing CP/M facilities.
- ☐ I have enclosed \$5.00 for the "CP/M Features and Facilities" manual (California residents, please add 6% Sales Tax).

Name _____

City _____ State ____ Zip ____

OI DIGITAL RESEARCH

Box 579 Pacific Grove, California 93950



CP/M User Manual (1977)

Computer Chronicles

Gary Kildall co-hosted with Stewart Cheifet from 1983-1990

Weekly half-hour PBS television series filmed in San Mateo, CA

Gary provided insights, commentary on products, and discussion on the ever-expanding personal computer sphere









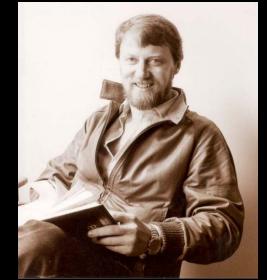
In his own voice...





"Gary views computers as learning tools rather than profit engines. His career choices reflect a different definition of success, where innovation means sharing ideas, letting passion drive your work and making source code available for others to build upon. His work ethic during the 1970s resembles that of the open-source community today."

"Computer Connections: People, Places, and Events in the Evolution of the Personal Computer Industry"
-- Gary Kildall Memoir, 1993 Edition



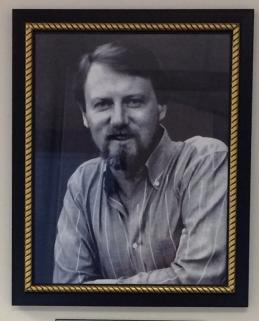
IEEE MILESTONE IN ELECTRICAL ENGINEERING AND COMPUTING

The CP/M Microcomputer Operating System, 1974

Dr. Gary A. Kildall demonstrated the first working prototype of CP/M (Control Program for Microcomputers) in Pacific Grove in 1974. Together with his invention of the BIOS (Basic Input Output System), Kildall's operating system allowed a microprocessor-based computer to communicate with a disk drive storage unit and provided an important foundation for the personal computer revolution.

April 2014





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