## C. W. GEAR

Ph.D.	Mathematics	University of Illinois U-C	1960
M.S.	Mathematics	University of Illinois U-C	1957
M.A.	Mathematics	Cambridge	1960
B.A.	Mathematics	Cambridge	1956

## **EMPLOYMENT**

2013-	Senior Scientist, Chem & Bio Eng., Princeton University (Courtesy position)	
2010-2013	Senior Scientist, Chem & Bio Eng., Princeton University (Part time)	
2004-2010	Senior Scientist, Chem Eng., Princeton University (Courtesy position)	
2002-2004	Technical Staff Member, Chem Eng., Princeton University (24%t time)	
2000-	President Emeritus, NEC Research Institute	
1992-2000	President, NEC Research Institute, Princeton, NJ	
1990-1992	Vice President, Computer Science Research Division	
1990 -	Professor Emeritus, University of Illinois at Urbana-Champaign	
1985-1990	Head, Department of Computer Science, and	
	Professor, Computer Science,	
	Applied Mathematics, and Electrical and Computer Engineering,	
	University of Illinois at Urbana-Champaign	
1969-1990	Professor, Computer Science and Applied Mathematics	
1965-1969	Associate Professor, Computer Science and Applied Mathematics	
1962-1965	Assistant Professor, Computer Science and Applied Mathematics	
1960-1962	Engineer, IBM British Laboratories, Hursley, England	

## **AWARDS**

2002	Dept. of Army: Outstanding Civilian Service Medal
2001	University of Illinois Alumni Achievement Award
1996	Elected to the American Academy of Arts and Sciences
1991	Elected to the National Academy of Engineering
1987	Honorary Doctorate, Royal Institute of Technology, Stockholm
1980	Halliburton Educational Foundation Award of Excellence
1979	ACM SIGNUM George E. Forsythe Memorial Award
1956	Johnson Foundation Fellow
1956	Fulbright Fellow

# PROFESSIONAL SOCIETIES & ACTIVITIES

*Memberships:* NAE, IEEE (Fellow), Am. Acad. Arts & Sciences (Fellow), SIAM (Fellow, past President). Former memberships: Am. Assoc. Adv. Science (Fellow), ACM (Fellow), British Computer Society (Fellow).

#### Society Offices:

AAAS Chair, Section T, 2005

CICIAM (Committee for International Congresses on Industrial and Applied Mathematics),

Chair, 1991-1995

ICIAM (International Congress on Industrial and Applied Mathematics):

1988-1991, President

SIAM (Society for Industrial and Applied Mathematics) President: 1987-1988

SIAM Vice President for Publications, 1990-1992

SIAM Council: 1980-1989

ACM Turing Award Selection Committee: 1989-1994

ACM Council Member: 1975-1977

ACM SIG/SIC Board: 1974-1976, 1978-1980

SIGNUM Special Interest Group on Numerical Analysis (SIGNUM) of ACM: Chairman

1973-1975, Board of Directors: 1967-1970, 1972-1973, 1980-1983

#### AREAS OF RESEARCH

Numerical integration of differential equations Automatic problem solving systems Simulation and network analysis Computer Graphics & Vision

#### **PATENTS**

US Patent 3,246,315, "Read Only Memory," Apr 1966 US Patent 5,579,401, "Feature Grouping in Moving Bodies in an Image." Nov 1996

#### SUPERVISION OF STUDENT RESEARCH

M.S. Degrees Supervised: 34 Ph.D. Degrees Supervised: 22

#### **EDITORSHIPS OF JOURNALS**

1985-1989	Managing Editor, SIAM J. on Scientific & Stat. Comp.
1983-1990	Transactions of Society for Computer Simulation
1982-present	Journal Computational and Applied Mathematics
1979-1984	SIAM Journal on Scientific and Statistical Computing
1978-1984	ACM Transactions on Mathematical Software
1973-1978	Advisory Board, Computers and Graphics
1968-1971	SIAM Journal on Numerical Analysis
1967-1969	Newsletter of ACM Special Interest Group on Graphics

#### PROFESSIONAL SERVICE

NRC ad hoc Committee on Best Practices in Peer Review, 2011 –2013

Member, NRC LAB (Laboratories Assessment Board), 2009 -

NRC standing committee: Joint Improvised Explosive Device Defeat Organization 2006 -2011

Member of ALAG (Army Laboratories Assessment Group), 2004 – 2011

NRC NIST Assessment Board: Vice Chair, Info Technology Panel, 2003 - 2005

NRC Committee on Army Science and Technology for Homeland Defense 2002-2004

NRC Army Research Laboratory Technical Advisory Board: 1995-2002. Chair 2000-2002

NRC Board of Mathematical Sciences: 1997-2000

NRC Committee on Future Environments for the National Institute of Standards and Technology, 2001

Computing Research Association Board of Directors: 1988 - 2000

Univ. of Illinois Beckman Center Advisory Committee: 1994-2004

Princeton University CS Department External Advisory Committee: 1996-2002

NSF Advisory Committee for Computer Science Infrastructure: 1989-1992

Board of Governors of the Institute for Mathematics and its Applications: 1987-1989, 2000-2002 Advisory Committee for Mathematics and Computer Science Air Force Office of Scientific

Research: 1986-1987

NSF Advisory Committee for Computer Research: 1985-1988

Board of Trustees, Universities Space Research Association: 1983-1989; Vice Chairman, 1984-1985; Chairman, 1985-1986

National Research Council Advisory Panel for the National Bureau of Standards on Scientific Computing: 1981-1983

Numerical Computation Panel for COSERS Report

Institute for Computer Applications in Science and Engineering (ICASE) and Research Institute for Applications of Computer Science (RIACS): 1978-1984, Scientific Council; 1982-1984, Chairman

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