

## **ARTHUR RICHARD NEWTON**

Dean and the Roy W. Carlson Professor of Engineering  
University of California, Berkeley

### **EDUCATION**

B.Eng., (1973) University of Melbourne, Australia  
M. Eng. Sci. (1975), University of Melbourne, Australia  
Ph.D. (1978), University of California, Berkeley  
Doctorate of Laws, *honoris causa* (2003), University of Melbourne, Australia

### **AREAS OF RESEARCH EMPHASIS**

- ◆ Computer aided design of electronic circuits and systems, design methods, and architecture of electronic systems.
- ◆ The application of Information and Communications Technologies (ICT) to the solution of tough societal and quality-of-life problems

### **EXPERIENCE IN HIGHER EDUCATION**

Dean, College of Engineering, July 2000 - present  
Chairman, Department of Electrical Engineering & Computer Sciences, University of California, Berkeley, July 1999 – June 2000  
Vice Chairman, Department of Electrical Engineering and Computer Sciences, University of California, Berkeley, September 1985 - June 1988  
Professor, University of California, Berkeley, May 1985 - present  
Associate Professor, University of California, Berkeley, May 1982 - May 1985  
Assistant Professor, University of California, Berkeley, January 1979 - May 1982

### **PROFESSIONAL SERVICE**

Member, CAD Framework Initiative, Technical Advisory Board, 1988 - 1997  
Founding Member, Electronic Design Interchange Format (EDIF), Steering Committee, 1983 -1989  
Founding Member, Electronic Design Interchange Format (EDIF), Technical Committee, 1983 - 1988  
Associate Editor, IEEE Transactions on Computer Aided Design, 1985 - 1988  
Member, IEEE Circuits and Systems Society, Administrative Committee, January 1986 - 1989  
Member & Session Organizer, IEEE CANDE Committee, 1978 - present  
Technical Program Chair, ACM/IEEE Design Automation Conference, 1988 - 1989  
Vice Chair, ACM/IEEE Design Automation Conference, 1990  
General Chair, ACM/IEEE Design Automation Conference, 1991  
Industrial Program Chairman, ACM/IEEE Design Automation Conference, 1992 - 1993.  
Technical Program Committee, Int'l. Solid-State Circuits Conference, 1981-1985.  
Technical Program Committee, IFIP VLSI Conference, 1987, 1989, 1991  
Technical Program Committee, ACM/IEEE Design Automation Conference, 1986 --1989  
Technical Program Committees, IEEE Int'l. Conf. on Computer Aided Design, 1984 - 1986, 1989 - 1990  
Technical Program Committee, European Design Automation Conference, 1991 - 1995  
Technical Program Committee, ASIA-PACIFIC Conf. On Circ. & Syst., 1991 - 1995  
Member, IFIP WG 10.5 VLSI Committee, 1991 - 1998  
Member, DARPA ISAT Committee, 1995 - 1998  
Member, Internat. Computer Initiative Scientific Centre Steering Committee, Moscow, Russia, 1992 - 2001  
Member, Scientific Advisory Group, National ICT Australia (NICTA), June 2002-present

## **PROFESSIONAL EXPERIENCE**

Consultant to many companies at various times, including:

Digital Equipment Corporation, Hewlett-Packard, IBM Corporation, General Electric, Intel, Kawasaki Steel Corp., Matsushita (MEC and MEI), Microlinear Inc., Microelectronics and Computers Corporation (MCC), MicroSim Inc., Motorola, National Semiconductor, Philips, RCA, PiE Design Systems Inc., Redwood Design Automation, Seattle Silicon Technology, Siemens, A G., Silicon Systems Inc., Sony Corp., Tektronix Inc., Toshiba, TRW, Valid Logic Systems, ViewLogic Inc., Xerox PARC - at various times, 1979 - present

Co-founded a number of high-technology companies, including:

SDA Systems (now Cadence Design Systems), PIE Design Systems (now a part of Cadence), Simplex Solutions (now a part of Cadence), Crossbow Technology, Silicon Light Machines, and Synopsys

Member, Technical Advisory Board: Sequent Computers Inc., Portland, OR, February 1985 – 1992; Cadence Design Systems., San Jose, CA, January 1989 - January 1993 (Chair, 1990-1993); Synopsys Inc., San Jose, CA, January 1989 – present; IMEC, Leuven, Belgium, September 1991 – 1997; Objectivity Inc., Menlo Park, CA, December 1988 - April 1994; QuickTurn Design Systems, Mountain View, CA, August 1993 - 1995; Interconnetix, Portland, OR, March 1993 – 1997; Simplex Solutions, Sunnyvale, CA, October 1995 – March 2002; Lightspeed Semiconductor, October 1996-present; Radiata (now a Cisco company), Sonics, Inc., June 1995-present; Airgo Networks, March 1998-present; Pharmix, Inc. March 2002-present; and Form Factor, 1998-present. Member of the Technology Council, ST Microelectronics, 2000-present

Venture Partner, The Mayfield Fund, May 1988 – December 2002

Acting President and CEO, Silicon Light Machines (formerly Echelle, Inc.), Nov. 1994 - July 1995

Venture Partner, Tallwood Venture Capital, January 2003 - present

Member, Technical Advisory Board, Microsoft Research, Jun 1997 – present

Member, Board of Trustees, Anita Borg Institute for Women and Technology, March 2001 - present

## **HONORS AND AWARDS**

Dixon Scholarship (top graduating student, Electrical Engineering) 1972

Best Paper Award, European Solid State Circuit Conference, November 1983

Best Paper Award, ACM/IEEE Design Automation Conference, June 1987, June 1990

Best Paper Award, IEEE International Conference on Computer Design, October 1988

Best Paper, IEEE Trans. On Computer Aided Design of Integrated Circuits and Systems, 1989

Distinguished Lecturer, IEEE Circuits and Systems Society, 1985 -1986

C. Holmes McDonald Distinguished Teaching Award, Eta Kappa Nu National Honor Society, 1986

IEEE Circuits & Systems Society Golden Jubilee Medal, 2000

Honorary Professor in Integrated Circuit Design, National Chiao Tung University, Hsinchu, Taiwan

2003 EDAC Phil Kaufman Award

## **ORGANIZATIONS**

Member, National Academy of Engineering

Fellow, IEEE

Member, ACM