

Bradley W. Dickinson, Ph.D.

Personal

Born: St. Marys, PA
Address: 7 Abby Drive, Lawrenceville, NJ 08648
Home Telephone and Fax: (609)-895-0647
Marital status: Married, two children

Office: Room B-322, Engineering Quadrangle
Department of Electrical Engineering
Princeton University
Princeton, NJ 08544-5263

E-mail: bradley@princeton.edu

WWW: <http://www.princeton.edu/~bradley>

Office Telephone: (609)-258-4644

Fax: (609)-258-2158

Education

B.S. in Engineering, with Highest Honors, Case Institute of Technology,
Case Western Reserve University, Cleveland, OH, 1970.

M.S.E.E., Stanford University, Stanford, CA, 1971.

Ph.D. (Electrical Engineering), Stanford University, 1974.

Honors and Societies

National Merit Scholar, 1966-1970.

National Science Foundation Fellow, 1970-1973.

Elected IEEE (Institute of Electrical and Electronics Engineers) Fellow, 1987

IEEE, Tau Beta Pi.

Academic Positions

Professor of Electrical Engineering, Princeton University, 1985-

Associate Dean for Academic Affairs, School of Engineering and Applied Science, Princeton University, 1991-1994.

Associate Professor of Electrical Engineering and Computer Science, Princeton University, 1980-1985.

Associated Faculty Member, Program in Applied and Computational Mathematics, 1984-

Visiting Associate Professor of Electrical Engineering and Computer Science, The Johns Hopkins University, 1982.

Assistant Professor of Electrical Engineering and Computer Science, Princeton University, 1974-1980.

Professional Activities

Founding Co-Managing Editor, *Mathematics of Control, Signals, and Systems*, Springer-Verlag, 1987-2000.

Member, Editorial Board, Springer-Verlag Communications and Control Engineering Monograph Series, 1990-

Founding Co-Editor, *Electronic Newsletter on Systems, Control, and Signal Processing*, 1986-1993.

Member, Administrative Committee, IEEE Neural Networks Council, 1989-1993.

Associate Editor, *IEEE Trans. on Information Theory*, 1984-1987.

Member, Board of Governors, IEEE Information Theory Group, 1981-1986.

Member, Multidimensional Signal Processing Technical Committee, IEEE Acoustics, Speech, and Signal Processing Society, 1980-1985.

Chairman, Signal Processing Technical Committee, IEEE Control Systems Society, 1983-1985.

Member, Board of Governors (formerly Administrative Committee), IEEE Control Systems Society, 1981 and 1985.

Associate Editor, *IEEE Trans. on Automatic Control*, 1980-1981.

Member of organizing and program committees for numerous workshops and conferences.

Evaluation panel member for various NSF programs (Research Initiation Grants, Graduate Fellowships, NSF Young Investigators)

University Activities

Undergraduate courses taught: Calculus; Computer-Aided Analysis and Design; Cryptography; Cryptography and Data Security; Digital Signal Processing; Image Processing and Transmission; Information, Coding, and Cryptography; Introduction to Discrete Systems; Linear Systems; Signal Analysis and Communication Systems; System Design and Analysis (Junior Design Project Lab).

Undergraduate course precepted: Engineering in the Modern World.

Graduate courses taught: Nonlinear Systems; Linear Systems; Optimization and Optimal Control; Random Processes in Information Systems.

Principal supervisor for 15 Ph.D. dissertations.

Over 100 technical papers written and two patents awarded.

Interests and Experience

Areas of expertise include video and image processing, digital signal processing, linear and non-linear systems analysis, information theory and communication systems, and neural networks. Sponsored research with support from NSF, ONR, AFOSR, NEC Research Institute. Technical consulting for IDA-CRD, Princeton, NJ. Editorial consulting for various publishers. Technical consulting on intellectual property matters.

Short Biography

Bradley W. Dickinson received the B.S. in Engineering from Case Western Reserve University in 1970 and the M.S. and Ph.D. degrees in Electrical Engineering from Stanford University in 1971 and 1974, respectively. Since 1974, he has been a faculty member at Princeton University; he is currently Professor of Electrical Engineering. From 1991 to 1994 he served as Associate Dean for Academic Affairs of the School of Engineering and Applied Science. During the Spring semester of 1982, he was a Visiting Associate Professor in the Department of Electrical Engineering and Computer Science at The Johns Hopkins University.

Prof. Dickinson is a member of Tau Beta Pi and the Institute of Electrical and Electronics Engineers (IEEE). He was elected a Fellow of the IEEE in 1987 “for contributions to system theory and its application in signal processing.” He is a founding co-Managing Editor of the journal *Mathematics of Control, Signals, and Systems* published by Springer-Verlag. He is also a founding co-Editor of the *E-LETTER (Electronic Newsletter) on Systems, Control, and Signal Processing*, the first internationally circulated electronic newsletter on systems and signals. Dr. Dickinson is a past Associate Editor of the *IEEE Transactions on Automatic Control* and the *IEEE Transactions on Information Theory*.

In thirty seven years at Princeton, Prof. Dickinson has taught courses including digital signal processing, image processing and transmission, linear and nonlinear systems, discrete systems, computer-aided design, communications, and optimization. He is author of the book *Systems: Analysis, Design, and Computation* (Prentice-Hall, 1991). He has supervised the dissertation research of 15 Ph.D.’s and published over one hundred technical papers. He holds two patents in the area of video data compression. His current research interests include signal, image, and video processing, sensory processing and sensory integration, neural networks, system theory, and stochastic processes.