# **CURRICULUM VITA**

# DENIS W. FERMENTAL dferment@eecs.tufts.edu

ACADEMIC RANK: Associate Professor of Electrical Engineering & Computer Science

## **DEGREES:**

1965	Ph.D.	Electrical Engineering, Northeastern University
Thesis Title:		AOrthogonal Signaling Pulses with the Same Autocorrelation@
1962	M.S.	Electrical Engineering, Northeastern University
1958	B.S.	Electrical Engineering, Tufts University

# **RESEARCH ACTIVITIES AND INTERESTS:**

Control Theory, Analog Electronics, Digital Electronics

# **APPOINTMENTS AT TUFTS:**

1988-1996	Chairman, Electrical Engineering & Computer Science Department
1967-present	Associate Professor of Electrical Engineering (Sabbatical 9/79-1/80)
1963-1967	Assistant Professor of Electrical Engineering
1958-1963	Instructor of Electrical Engineering

# INDUSTRIAL CONSULTING:

2002	Technical Consultant, Foley Hoag Law Firm
1980-1999	Control Engineering Consultant, Draper Laboratories, Cambridge MA
1965-1989	Consultant for United Electric Controls Company, Watertown MA

## **SUMMER EFFORTS:**

1983-1993	Research Engineer, Draper Laboratories, Cambridge MA
1971-1982	Research Engineer, United Electric Controls Company, Watertown MA
1958-1970	Research Engineer, Air Force Balloon Astronomy Project, Electrical
	Engineering Department, Tufts University,

# PROFESSIONAL ACTIVITIES:

1988-1997	Academic Advisor to IEEE
1984-1985	Academic Advisor to Tau Beta Pi (for Douglas Preis)
1977-1978	Treasurer, Sigma Xi
1971-1974	Educational Activities Committee and Member of General Committee for
	NEREM-71 NEREM-72 NEREM-73 and NEREM-74

## **PUBLICATIONS:**

"A Decomposition of the Jeffcott Rotor", D.W. Fermental, E. Cusson, and P. LaRocco, 2nd International Symposium on Magnetic Bearings, July 1990, Tokyo, Japan.

"Performance Comparison Between Centralized and Decentralized Control of the Jeffcott Rotor", P. LaRocca, D.W. Fermental, and E. Cusson, 2nd International Symposium on Magnetic Bearings, 1990, Tokyo, Japan. Draper Report CSDL-C-6319, Mk 5 Steller Tracker Functional Description, September 1992, (103 pages)

Draper Report CSDL-P-2920, The Jeffcott Rotor: Its Decomposition and Control, February 1990, (79 pages)

Draper Report CSDL-R-2131, Documentation on the Software to Implement the MARK 6 Inertial Platform Control Laws, April 1989 (262 pages)

Draper Report CSDL-R-1987, An Analysis of the Gimbal Lock Avoidance Control Loop in the Control System for the MARK 6 Inertial Measurement Unit, October 1986 (156 pages)

## **GRANTS RECEIVED:**

- "Industrial Application of Microprocessors", United Electric Controls Company, Watertown MA, 1976-1978
- "Instructional Scientific Equipment Program", National Science Foundation, 1968-1970

#### HONORS AND AWARDS:

Outstanding Faculty Award, Tufts University, 1996-1997 Lillian Leibner Award for Excellence in Teaching, Tufts University, 1977 Eta Kappa Nu (1966- ) Dolbear Scholarship, Tufts University, 1958 Tau Beta Pi (1957- )

## SCIENTIFIC AND PROFESSIONAL SOCIETIES IN WHICH REGISTERED:

Institute of Electrical and Electronics Engineers Sigma Xi

#### **TUFTS COMMITTEES AND ACTIVITIES:**

1997	Subcommittee of Curriculum Committee (College of Engineering)
1993	40-40-20 Committee
1991-1992	Lillian Leibner Award Committee
1989-1990	Academic Standing Committee (College of Engineering)
1988-1996	Executive Committee of the College of Engineering
1988-1996	Chairs Committee
1987-1988	Medford Computer Communications Task Force
1984-1985	Academic Awards (substitution for Douglas Preis)
1984	Academic Standing Committee (College of Engineering)
1984	Advisor Committee on Faculty Personnel (for Prof. R. Reuss, Geology), Spring1984
1983-1985	Policy and Programs Committee for the Graduate School
1980-1982	Assisted at Tufts/Boston Technical High School college orientation and electrical engineering
	laboratory program
1980-1981	Committee on Governance and Administration

1979	Search Committee for Engineering Dean
1978-1981	Computer Services Committee
1978	Advisory Committee on Libraries (substitution for Arthur Pike), Fall 1978
1976-1979	Curriculum Committee (College of Engineering)
1976-1979	Policy and Programs Committee (Arts and Sciences)
1976-1978	Educational Policy Committee
1975-1979	Financial Aid and Undergraduate Admissions Committee, (Chairman, 1976-1978)
1973-1975	Committee for New Structure for Graduate School

# **OUTSIDE ACTIVITIES:**

1994	Delegate to the State Democratic Convention
1996	Delegate to the State Democratic Convention