

VITAE

Harold L. Martin, Sr.

PRESENT: Senior Vice President for Academic Affairs
UNC General Administration
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EDUCATION: B.S.E.E., North Carolina A&T State University
December, 1973

M.S.E., North Carolina A&T State University
December, 1975

Ph.D., Virginia Polytechnic Institute & State University
January, 1980 (Ph.D. Dissertation Title: A Reconfigurable Cellular Array Structure)

FIELD OF SPECIALIZATION: General: Computer Engineering
Areas of Expertise:
Logic Systems (Digital Systems)
Microprocessor/Microcomputer Systems
Fault Detection in Logic Systems
Fault-Tolerant Architectures
Sequential Machines
Switching and Automata Theory
Integrated Circuit Design

RECENT ADMINISTRATIVE EXPERIENCE:

July 17, 2006 – Present Senior Vice President
University of North Carolina General Administration

As the Senior Vice President, I am responsible for leading the development and implementation of the academic mission of the University, including teaching, research, international programs and student affairs. I advise the President and provide leadership to the President's leadership council on academic affairs issues and related matters. I also advise the Board of Governors on academic affairs issues of university-wide importance; lead strategic academic planning and the

implementation of resulting policies affecting the system; work closely with campus chancellors and chief academic officers on university-wide academic initiatives; work to maintain the focus of the missions of the campuses, and implement the academic portion of the Long-Range Plan.

Units which comprise the *Division of Academic Affairs* include Academic Planning; Faculty Support and International Programs; Academic and Student Affairs; Sponsored Programs and Research; Strategy Development and Analysis; the College Foundation of North Carolina; and the North Carolina State Education Assistance Authority.

**January 3, 2000 – July 16, 2006 Chancellor
Winston-Salem State University**

As the Chancellor of WSSU, I serve as the executive and administrative head of the university, exercising overall authority, subject to the direction of the President of the University of North Carolina. The University of North Carolina is a sixteen-campus system governed by a Board of Governors elected by the Legislature of the State of North Carolina. The system is under the direction of a President; each campus has a Chancellor and a thirteen-member Board of Trustees. The Chancellor is responsible for carrying out the policies of the Board of Trustees and the Board of Governors. The Chancellor is the official medium of communication between the President, the administration, faculty members, students and employees.

Major Accomplishments:

- Developed an aggressive agenda for creating local, regional, and national reputation of excellence in the academic programs at Winston-Salem State University;
 - created an *Institutional Report Card* for assessing annual progress with this agenda;
 - built a strong administrative team to assist with the advancement of the institution.
- University received successful reaffirmation of accreditation by the Southern Association for Colleges and Schools (SACS) – *Campus visit occurred in April 2000.*
- Successful accreditation of the School of Business by the American Association of Collegiate Schools of Business (AACSB) – *Campus visit occurred in February 2000.*
- Initiated efforts to enhance enrollment, retention, and graduation rates
 - established the position of Associate Vice Chancellor for Enrollment Management to oversee initiatives;
 - restructured First Year College to strengthen retention and graduation rates initiatives;
 - revamped University's Honors Program;
 - established successful scholarship program;
 - SAT scores of first-time freshmen rose by nearly 70 points between Fall 1999 and Fall 2005;
 - Total enrollment grew by 94% between Fall 1999 (2,796) and Fall 2005 (5,556).
- Reorganization of University:
 - restructured academic divisions as schools and college;
 - established the Office of International Program;
 - established the position of Associate Vice Chancellor for Enrollment Management;
 - established the Office for Evening and Weekend Programs.
- Established efforts to enhance public image of institution:
 - reorganized University's Advancement Office;
 - enhanced staffing support for University's Office of Advancement;

- published major University publications.
- WSSU was ranked among Top Public Southern Comprehensive Colleges by *U.S. News and World Report* magazine for fifth consecutive year - #1 from 2001 to 2004; #2 in 2005.
- Developed *WSSU Strategic Plan* to guide efforts to build regional competitiveness of institution and created the *WSSU Report Card* to publicly report progress.
- Established *School of Graduate Studies and Research* in Fall 2001 with seven new masters' degree programs: Business, Education, Occupational Therapy, Physical Therapy, Rehabilitation Counseling, Nursing, and Computer Science.
- Established strong relationships with institutional constituency – corporate and community leadership, faculty, staff, students, and alumni.
- Established WSSU as a totally connected and wireless campus.
- Established *Technology Requirement Initiative* in Fall 2004 – which requires all entering freshmen to have laptop, desktop, or other technology device.
- Approximately \$85 million invested in new facilities and facility renovations – funded by North Carolina Higher Education Bonds and WSSU Foundation.
- Initiated *\$35 million WSSU Capital Campaign* in Fall 2004 (largest in university history) – raised approximately \$20 million to date.

**Nov. 1, 1994 – Dec. 31, 1999 Vice Chancellor for Academic Affairs
North Carolina A&T State University**

Major Responsibilities:

- Administrative oversight of all academic programs, which are supported by a faculty and staff numbering over 700. Academic units include the Schools of Agriculture, Business and Economics, Education, Nursing, and Graduate Studies, and the Colleges of Arts and Sciences and Engineering. Support units include the F. D. Bluford Library, Academic Computing and Telecommunications, Continuing Education, Summer School, and Evening and Adult Programs, Institutional Assessment, Air Force and Army ROTC Programs, Title III Program, and the Learning Assistance Center.
- Allocation of all resources that support educational programs (approximately \$40,000,000).
- Serve on the Chancellor's Cabinet with other Vice Chancellors and Special Assistants for Administrative Affairs and Legal Affairs.
- Serve as liaison to University's Board of Trustees Personnel Subcommittee and Education and Research Subcommittee.
- Leadership in faculty recruitment, faculty development, and promotion and tenure decisions.
- Facilitation of faculty governance and curriculum development.
- Represent the University in a wide range of forums.

Major Accomplishments:

- Working jointly with the Chancellor and other university administrators, faculty and community leaders, created the Piedmont Triad Center for Advanced Manufacturing (PT CAM). PT CAM is a joint venture with manufacturing industries in Guilford County, Guilford Technical Community College, Guilford County Schools, and the Greensboro Chamber of Commerce.
- Worked with the Deans to establish aggressive initiative to enhance academic program quality, including efforts to address low producing degree programs. After rigorous

assessment, a number of low producing degree programs were discontinued. Efforts are ongoing to continually review such programs. Since the reviews began three years ago, the number of such programs has been reduced by approximately 50%.

- Initiated efforts to improve accountability of through the establishment of term appointments for deans and chairpersons (*Effective Fall 1997*).
- Working with the Deans, developed strategies to enhance the recruitment and retention of exceptional faculty. These strategies included enhancing the recruitment of new faculty from a competitive national pool of candidates; establishing more competitive salaries for new hires; redefining the expectations of faculty university-wide for decisions related to reappointment, promotion, and tenure; more effective strategies for rewarding faculty; etc.
- In coordination with appropriate deans, established new degree programs: Masters in Social Work (Jointly with the University of North Carolina at Greensboro), Masters in Physics, Masters in Chemical Engineering, Bachelors in Manufacturing Systems, Bachelors in Graphic Communications Systems, Bachelors in Electronics and Computer Technology.
- Facilitated with appropriate deans the submission of proposals which resulted in UNC System approval of new academic program planning: Ph.D. in Industrial Engineering, Masters in Civil Engineering, and Masters in Management.
- Appointed a university-wide committee to review the University's general education requirements and to make recommendations for significant enhancements to these requirements defined to enhance the quality of the freshman and sophomore educational experience and to enhance student performance.
- Appointed university-wide faculty committee to review and revise the University Faculty Handbook.
- Appointed a university-wide faculty committee to review and revise the Faculty Evaluation and Rewards process.
- Initiated a faculty development program.
- Established programs to enhance student retention and graduation rates. The University's retention and graduation rates have improved each of the past four years.
- Established program to significantly enhance the technology and telecommunications infrastructure of the campus and the availability of computers for faculty and students. The position of *Associate Vice Chancellor for Academic Affairs – Technology and Telecommunications* was established in January 1998 to provide aggressive leadership for the ongoing planning and implementation of strategies defined to ensure the availability of the most competitive resources for our faculty and students.
- Worked with faculty committees to establish a Phased Retirement Policy and a Post-Tenure Review Policy.

**July 1, 1989 - October 31, 1994 Professor and Dean, College of Engineering
North Carolina A&T State University**

Major Responsibilities:

- Administrative oversight of all academic programs (Bachelors, Masters, and Doctoral) and student affairs (1700 undergraduates and 400 graduates), which were supported by a faculty of 103 (93 tenured/tenure track faculty, 8 faculty funded through external sources, and 2 visiting faculty from industry/government) and a budget of approximately \$15 million.
- The College was composed of seven departments (architectural, chemical, civil, electrical, industrial, and mechanical engineering, and computer science), the Center for Composite

Materials, the Mars Mission Research Center, the Rockwell Solid State Electronic Materials Laboratory, and the Communications and Signal Processing Laboratory.

- Allocation of all resources supporting teaching, research, and service.
- Provide leadership for all faculty recruitment, promotion, and tenure decisions, curriculum development, and faculty governance.
- Primary fund raising responsibility for the College of Engineering.
- Member of Deans Council.
- Liaison with regional corporate/government technical executives.

Major Accomplishments:

- Developed a well-defined Strategic Plan for the School of Engineering, with input from chairpersons, faculty, staff, students and the School's Industry Advisory Board. This document provided a critical plan that defined the mission, goals, priorities, strengths, and weaknesses for the School and each Department for the five-year period 1991 to 1996. These School and Department specific goals provided the framework for many of the achievements of the School during my tenure as Dean.
- Increased the number and quality of degree programs:
 - The diversity of undergraduate programs developed from six to eight: Agricultural and Biosystems Engineering and Computer Science joined the School of Engineering in 1990 and 1992 respectively, complementing the existing programs of Architectural, Chemical, Civil, Electrical, Industrial, and Mechanical Engineering. All engineering programs were accredited by the Accreditation Board for Engineering and Technology, Inc. (ABET, Inc.). The Agricultural and Biosystems Engineering, Chemical Engineering, and Civil Engineering programs gained accreditation for the first time during my tenure as Dean in 1990 and 1991 respectively.
 - The Computer Science program was visited by the Accreditation Board for Computer Science, Inc. (CSAB, Inc.) for the first time in October 1993, resulting in accreditation in July 1994.
 - The following graduate programs were initiated in January 1994: Masters Degree Program in Computer Science, Ph.D. Programs in Electrical Engineering and Mechanical Engineering. The Ph.D. programs were the first doctoral programs to be offered by North Carolina A&T State University. These new programs complemented the existing graduate programs: Masters of Science Degree Programs in Engineering (options in Agricultural and Biosystems, Chemical, and Civil Engineering), Electrical Engineering, Industrial Engineering, and Mechanical Engineering.
- Initiated the discussions that ultimately lead to requests for authorization to plan new master's degree programs in Chemical Engineering and Civil Engineering.
- Requested the name change of the School of Engineering to the *College of Engineering* in May 1994 based on the enormous growth in quality and breadth of the educational and research programs.
- Established extensive linkages between the College of Engineering and local and regional corporate and government agencies and the Chambers of Commerce in Greensboro and Winston-Salem.
- Established a very strong Industry Advisory Board for the College of Engineering consisting of business leaders and alumni from industries and agencies from throughout the country.
- The number and quality (based on high school GPA and SAT/ACT scores) of undergraduate students grew from 850 students to approximately 1700, an increase of 100%. The number

and quality of graduate students also grew from 145 students to approximately 342 students, an increase of 135%.

- Faculty size grew from 54 to 94. The faculty members hired in the College of Engineering were recruited exclusively from the top 25 universities in the country based on the US News and World Report rankings of engineering doctoral programs.
- Research in the College grew from approximately \$5 million in 1989 to approximately \$10.5 million in 1994. This increase in research and developmental funding resulted in the creation of exceptional research and computing facilities.
- The visibility of the College of Engineering grew significantly throughout the State, the region, and the country. This growth in visibility enhanced the level of corporate and federal funding and the quality of faculty and students.
- The quality of educational and research programs has continued to grow through the involvement of our faculty on national advisory boards, accreditation boards, as editors of professional journals, and involvement in professional societies at the local and national levels. Our students also are very aggressively involved in activities related to their professional societies as well, participating in local and regional projects and design competitions and serving as officers of their professional societies at the local, regional, and national levels.
- Developed extensive computing and telecommunications infrastructure in support of educational and research programs.
- Developed a very successful partnership between the College of Engineering and the local corporate and municipal leaders. This partnership evolved through the promotion of the College of Engineering as the “Piedmont Triad’s College of Engineering”.
- Successful funding efforts, including:
 1. Established the following *Endowed/Distinguished Faculty Positions*:
 - The Duke Power Distinguished Professorship in Electrical Engineering
 - The Boeing Distinguished Professorship in Mechanical Engineering
 - The Ford Motor Company Endowed Professorship in Mechanical Engineering
 - The E-Systems Endowed Professorship in Mechanical Engineering
 - The DOE Samuel P. Massie Chaired Professorship in Environmental Engineering
 2. Research expenditures in the College grew from \$5 million in 1989 to approximately \$10.5 million in 1994.
 3. Private and philanthropic investments in the College grew from \$750,000 per year in 1989 to approximately \$5.5 million in 1994.
 - Recognized by the National Technical Association (NTA) in 1994 as the *College of Engineering of the Year*.

OTHER PROFESSIONAL EXPERIENCE:

- | | |
|-------------------------------------|--|
| January 1987 - June 30, 1994 | Joint Appointment as an Adjunct Associate Professor
Department of Electrical and Computer Engineering,
North Carolina State University, Raleigh, N.C. |
| July 1, 1985 - January 1987 | Department Chairman, North Carolina A&T State University |
| October 1984 - June 30, 1985 | Acting Department Chairman of Electrical Engineering
North Carolina A&T State University |

July 1982 - September, 1984

**Associate Professor of Electrical Engineering
North Carolina A&T State University
Tenured July 1, 1984**

January 1980 - June 1982

**Assistant Professor of Electrical Engineering
North Carolina A&T State University**

CONSULTING:

Battelle, Incorporated, Durham, North Carolina
Research Triangle Institute, Research Triangle Park North Carolina
SCEEE, St. Cloud, Florida
Gilbarco, Inc., Greensboro, North Carolina
Naval Underwater Systems Center, New Port, Rhode Island
Digital Equipment Corporation, Hudson, MA

HONORS:

Thurgood Marshall College Foundation
Award for Excellence October 2008
Virginia Tech College of Engineering
- Academy of Engineering Excellence May 2008
Honorary Degree – Wake Forest University May 2007
Citizen and Service Award – Duke Power 2005
McDonald's 5th Annual African American
Achievement Award for Education February 2005
Alpha Man of the Year
Alpha Lambda Chapter of Alpha Phi Alpha December 2004
Outstanding Service Award
Mu Epsilon Chapter, Omega Psi Phi Fraternity 2004
Excellence in Leadership Award – Salvation Army 2004
Citizen of the Year Award
Alpha Kappa Alpha Fraternity 2003
The Triad's 10 to Watch – The Business Journal January 2001
Man of the Year Award – W-S Chronicle 2001
Life Line Scouting Award – Old Hickory Council 2001
Virginia Polytechnic Institute and State University
- Distinguished Graduate Alumni Award June 2004
- Bradley Department of Electrical
Engineering Academy of Distinguished
Alumni Award October 1998
North Carolina A&T State University
Alumni Association Alumnus of the Year 1976
Tau Beta Pi
Alpha Lambda Delta
Eta Kappa Nu
Who's Who in American Colleges and Universities 1974

PROFESSIONAL
ACTIVITIES:

Taught a two-week short course at Digital Equipment Corporation
in Hudson, Massachusetts, on "VSLI Design in CMOS," January
1985

Reviewer for the Circuits and Systems Society of IEEE, 1985

Member of the Technical Working Group on Systems Design and Testing of the Microelectronics Center of North Carolina. Responsible for developing/selecting VLSI Circuit Design Facility and CAD tools

Member of Southern Association for Colleges and Schools (SACS) Accreditation Team, February 1984

Chairman (1986-87), Vice Chairman (1985-86), of Chairman's Technical Committee of the Microelectronics Center of North Carolina

Session Chairman, Computer Software, North Carolina Symposium and Exhibition, 1986, Greensboro, NC

Session Chairman, Computer Architecture, SoutheastCon '85, April 1985, Raleigh, NC

Session Chairman, Computer Communication Networks, Nineteenth Southeastern Symposium on Systems Theory, April, 1987, Charlotte, NC

Session Chairman, Power Systems, SoutheastCon '88, April, 1988, Charlotte, NC

Panel Moderator, HVAC Education Symposium, sponsored by the Center for Energy Research and Training, "The University Perspective of HVAC Education," September 14, 1989

**ADVISORY BOARDS/
BOARDS:**

Research Triangle Institute	(2008 -)
Winston-Salem Foundation	(2002 -)
SACS Commission on Colleges and Schools	(2004 -)
Central Intercollegiate Athletics Conference	(Jan'00 – June'06)
Microelectronics Center of North Carolina	(2004 -)
Blue Cross and Blue Shield of North Carolina	(January 2005 -)
Winston-Salem State University Foundation	(January 2000 -)
Forsyth County United Way	(May 2000 -)
Piedmont Club Board of Directors	(August 2000 -)
Winston-Salem Chamber of Commerce	(January 2000 -)
Winston-Salem Symphony	(June 2000 – 2005)
Forsyth County Infant Mortality Reduction Coalition	(June 2000 – 2004)
!dealliance Board	(May 2000 -)
Winston-Salem Alliance	(August 2000 -)

Piedmont Triad Partnership Board (June 2000 -)
Member of Chairman's Technical Council and Technical Advisory Committee to the Administration of the Microelectronics Center of North Carolina (MCNC) 1984-1989. Served as Vice-Chairman in 1984 and Chairman in 1985
Member of the Advisory Committee for Engineering for the National Science Foundation, August 1989 - August 1992
Member of the Aeronautics Advisory Committee for the National Aeronautics and Space Administration
Member of the Technology and Commercialization Committee for the National Aeronautics and Space Administration
NSPE Engineering Advisory Group
Board of Trustees for the North Carolina School of Science and Mathematics (January 1994 – December 1999)
Board of Directors of the Piedmont Triad Center for Advanced Manufacturing (PT CAM)
Board of Directors of the Piedmont Triad Engineering Research Center (PTERC)
Board of Directors of Graduate Engineering for Minorities (GEM)
Board of Directors for Southeastern Consortium for Minorities in Engineering (SECME), Board Chair (1992 – 1997)
North Carolina Board of Science and Technology
North Carolina Biotechnology Center Advisory Board
VPI&SU College of Engineering Advisory Board (Committee of 100), Board Chair (1996-97)
VPI&SU Bradley Department of Electrical Engineering Advisory Board, Board Chair (1994-95)
University of Delaware College of Engineering Advisory Board
Norfolk State University Electronics Engineering Technology Advisory Committee, Chair
Accreditation Board for Engineering and Technology, Inc. (ABET) Evaluator for Electrical Engineering Programs (1991 - 1996)
Member of the IEEE Committee on Engineering Accreditation Activity (CEAA) (1991 – 1996)

**FUNDED RESEARCH
AND DEVELOPMENT
AWARDS:**

College Access Challenge Grant
Sponsor: U.S. Department of Education (\$1.9 million)
October 1, 2008 – September 30, 2010

The Center for Community Safety
Sponsor: The Kate B. Reynolds Charitable Trust (\$1.8 million)
January 1, 2001 to December 31, 2006

Laboratory for Communication, Signal Processing, Expert Systems, Application Specification, and Integrated Circuit Design
Sponsor: National Science Foundation (\$2.5 million)

September 1, 1989 to August 31, 1994 (Foster and Martin)

Integration of boundary Scan with Cellular-Based Built-In Test Architectures

Sponsor: Honeywell Systems & Research Center (\$25,000)

August 1, 1988 to July 31, 1989

Addendum to Engineering Research Proposal to the National Science Foundation

(Joint Proposal with Dr. Nino Masnari of NCSU)

Sponsor: National Science Foundation (\$588,500)

October 1, 1988 to September 30, 1993

Digital Systems Laboratory Development

Sponsor: Hewlett Packard (\$50,000)

July 15, 1989 to July 14, 1990

Travel Funds for HBCU Faculty to Attend VLSI Conference and Symposium

Sponsor: National Science Foundation (\$9,000)

July 1, 1989 to June 30, 1990

Application of Error-Detecting/Correcting Codes in Fault Tolerant Logic Design for VLSI

Science Foundation (\$17,100)

July 1, 1989 to June 30, 1990 (Lala and Martin)

Agreement Between The Microelectronics Center Of North Carolina and North Carolina A&T State University

Microelectronics Center of North Carolina (\$35,455)

July 1, 1987 to December 15, 1987

Integration of Boundary Scan with Built-In Self-Test Architectures

Northern Telecom, Inc. (\$35,000)

January 1, 1989 to April 13, 1990

Travel Funds For HBCU Faculty To Attend VLSI

National Science Foundation (\$7,635)

July 1, 1989 to December 31, 1989

Electrical Engineering Rockwell International Fellowship

Rockwell International (\$51,454)

October 1, 1987 to September 30, 1988

Workstation Approach to Integrated Device/Circuit and Timing Simulation for VLSI CAD

Microelectronics Center of North Carolina (\$42,210)

May 1, 1987 to May 1, 1988

Multiple Processor Architectures for Implementation of Matrix Operations

Department of the Army (\$97,931)
August 15, 1984 to August 14, 1987

Strategic Plan For The North Carolina A&T State University
School of Engineering

National Science Foundation (\$45,531)
February 15, 1991 to July 31, 1992

Research Capabilities Presentation

McDonnell Aircraft (\$9,200)
April 1, 1991 to June 30, 1991

Minorities In Engineering Program (MEP), Initiative For
Minorities In Higher Education

British Petroleum America, Inc. (\$350,000)
June 1, 1991 to December 31, 1995 (Martin and Sharpe)

Program Coordinator Support for MCNC Network Activity

Microelectronics Center Of North Carolina (\$133,743)
March 15, 1988 to June 30, 1993

National Science Foundation Graduate Fellowship

National Science Foundation (\$21,500)
June 1, 1991 to May 30, 1996

HBCUs Engineering and Computer Science Programs

AT&T Foundation (\$150,000)
November 1, 1993 to June 30, 1999

The Kellogg Center of Excellence in Engineering

W.K. Kellogg Foundation (\$3,000,000)
January 1, 1993 to October 30, 1998 (Martin, Sharpe, and Kelly)

ONR Ph.D. Fellowship Program

Department of the Navy (\$1,557,100)
January 1, 1992 to June 30, 2000

NSF Alliance for Minority Participation (AMP)

National Science Foundation (\$10,000,000)
November 1, 1992 to October 31, 2002

PRESENTATIONS:

Dr. Martin has made over 125 presentations at national and international conferences on fault tolerant systems, computer architecture, design for testability, and VLSI design systems. He

has also been an invited speaker at many meetings/conferences on the subject of increasing the representation of underrepresented minorities and women in engineering.

UNIVERSITY
COMMITTEES:

Dr. Martin has been involved in many university committees at North Carolina A&T State University, including:

Chancellor's Cabinet
SACS 2000 Steering Committee
Space Allocation/Planning Committee
University Budget Committee
Retention and Graduation Rates Committee
Awards and Honorary Degrees Committee
SIS Plus Steering Committee
HRS Steering Committee
Commencement Committee
Teacher Education Council
University Delegate to the Faculty Assembly
University Computer Advisory Committee

UNIVERSITY SYSTEM
COMMITTEES:

Senior Academic and Administrative Officer Review Committee
Task Force on Technology
Facilities Planning Advisory Committee
Task Force to Review Grievance Procedures in the UNC-System

PUBLICATIONS:

H. L. Martin, F. G. Gray, J. R. Armstrong, "One-Dimensional Control in Self-Reconfigurable Systems", Proceedings of SoutheastCon'79.

H. L. Martin, F. G. Gray, J. R. Armstrong, "Multiple Faults in a One-Dimensional Self-Reconfigurable Control System", Proceedings of the Eleventh Annual Southeastern Symposium on System Theory, pp. 66-69.

H. L. Martin, F. G. Gray, J. R. Armstrong, "A Two-Dimensional Self-Reconfigurable Tessellation Automaton", Proceedings of SoutheastCon'80, April 1980

H. L. Martin, F. G. Gray, J. R. Armstrong, "Multiple Faults in a Two-Dimensional Self-Reconfigurable Tessellation Automaton", Proceedings of the Twelfth Annual Southeastern Symposium on System Theory, May 1980.

H. L. Martin, W. E. Alexander, "A Real Time Image Processing System", Final Report, General Electric Co., January 1982.

H. L. Martin, W. E. Alexander, B. Thimaya, "A VLSI Implementation of a Digital Filtering Algorithm for Image Processing", Proceedings of the Fourteenth Annual Southeastern Symposium on System Theory, pp. 202-205, April 1982.

H. L. Martin, W. E. Alexander, B. Thimaya, "A VLSI Chip for Real time Image Processing", Proceedings of SoutheastCon'82, pp. 407-410, April 1982.

H. M. Martin, R. M. Frederick, "Reliability Method for Maximum Efficiency in a System of Interconnected Processors", Proceedings of the Fifteenth Annual Southeastern Symposium on System Theory, pp. 199-204, March 1983.

H. L. Martin, S. Sadhasivan, "A Parallel MIMD Machine for Matrix Computations", Proceedings of the Sixteenth Annual Southeastern Symposium on System Theory, March 1984.

H. L. Martin, S. Sadhasivan, "An Array Processor for Matrix Computations", 18th Asilomar Conference on Circuits and Systems, November 1985.

H. L. Martin, C. C. Narasimhaiah, "A Programmable Interconnection Network Module", Proceedings of SoutheastCon'85, April 1985.

J. Mitchell, H. L. Martin, W. E. Alexander, and E. Sherrod, "A Multiple Processor Implementation of a Real Time Image Processing System", 17th Southeastern Symposium on System Theory, March 1985.

H. L. Martin, A. Kumar, S. Velamuri, and G. Lebby, "On Line Monitoring and Real Time Control of Power Systems, "Miami Technicon'87.

A. Kumar, A. Mohammadi, and H. L. Martin, "Load Frequency Control in a Laboratory Environment", 30 Midwest Symposium on Circuits and Systems, September 1987.

J. Kim, H. L. Martin, S. Park, and W. Alexander, "VLSI Implementation of a Generic Architecture for Digital Signal Processing," 21st Asilomar Conference on Signals, Systems and Computers, November 2-4, 1987.

H. L. Martin, E. Hughes, J. Kim, E. Jones, "An Emulation Tool for Verification of Complex Algorithms Implemented on a Multiple Processor", Twentieth Southeastern Symposium on Systems

Theory, March 1988.

F. Flores, H.L. Martin, and Y. Kim, "VLSI Implementation of a Fast Fourier Transform algorithm," Proceedings of the 31st Midwest Conference on Circuits and Systems, August 1988.

Y. Kim, H. L. Martin, J. Kim, P. Roblin, "Quasi Three Section Model for MOSFETs", Proceedings of SoutheastCon'88.

Y.M. Kim, P. Roblin, H.L. Martin and J.H. Kim, "An Analytical CAD Model for Short Channel MODFET's, IEEE Trans. Electron Devices.

C.N. Zhang, H.L. Martin and D.Y.Y. Yun, "Parallel Algorithms and Systolic Designs for RSA Cryptosystem," 1988 International Conference on Systolic Arrays, May 1988.

H. Martin and Ranjani Ram, "A CAD Tool for circuit Extraction from VLSI Layout," Proceedings of Southeast Con '89," April 1989, Columbia, S.C.

H. Martin and C. Ryan, "Implementation Strategy for Boundary Scan with Built-In Self-Test," Honeywell, June 1989.

H. Martin and Ranjani Ram, "A CAD Tool for circuit Extraction from VLSI Layout," Proceedings of Southeast Con'89, April 1989, Columbia, SC.

Chris Ryan and J. Martin "A CAD Tool for Circuit Extraction from VLSI Layout," Processing Techniques," Final Interim Report, Naval Surface Weapons Center, September 1989.

J. Wicks and H. Martin, "Design of a Fault-Tolerant Central Processing Unit Using VHDL," 2nd Annual Symposium on Communications, Signal Processing, and ASIC VLSI Design, North Carolina A&T State University, March 21-22, 1991.

J. Wicks and H. Martin, "Design of a Fault-Tolerant Central Processing Unit Using VHDL," the 23rd Annual Southeastern Symposium on System Theory, the University of South Carolina in Columbia, South Carolina, March 10-12, 1991.

T. Kahveci and H. Martin, "Parallel Microprocessor Architecture as a Building Block Module for Implementation of Static Connected MIMDs: Architectural Design of Building Block Module," Proceedings of Southeastern Symposium on System Theory, 1992.

T. Kahveci and H. Martin, "Building Block Concept for Static Connected MIMDs: Development of Building Block Modules," Proceedings of Southeastern Symposium on System Theory, 1992.

S.S. Ardalan, H. Martin, T.K. Wang, and C. Stuart, "ASIC Implementation of a 16-Kbps Waveform Coder Using Adaptive Vector Quantization," IEEE International ASIC Conference and Exhibit (ASIC '92) Proceedings, September 1992.

PATENT

Patent No. 5,457,702

GRADUATE STUDENTS

DIRECTED:

Frank Batts	MSEE	May 1981
Richard Moore	MSEE	May 1981
Mohammed Ali-Pour	MSEE	August 1981
Timothy Wilder	MSEE	August 1982
Gregory Marrow	MSEE	August 1982
Willie Buie	MSEE	August 1982
Cedric Byrdsong	MSEE	May 1983
Gary Voncannon	MSEE	May 1983
Darryl Alexander	MSEE	May 1983
Marie Frederick	MSEE	August 1983
Richard Kuehn	MSEE	August 1983
Elwyn Jones	MSEE	December 1983
Michael Vaughan	MSEE	May 1984
Michael Washington	MSEE	May 1984
Alvernon Walker	MSEE	May 1985, **
Sathyamurthi Sadhasivan	MSEE	December 1985
Chitresh Narasimhaish	MSEE	May 1985
Jaimie Mitchell	MSEE	May 1985
Nabilla Abu-Saba	MSEE	December 1985
Nagesware Tanuku	MSEE	December 1985
Nabil Abu-Saba	MSEE	May 1986
Charles Flemmings	MSEE	June 1986
Bahman Gharaglozlo	MSEE	July 1986
Esther Hughes	MSEE	July 1986, **
Sunder Velamuri	MSEE	August 1986
Michael Smith	MSEE	August 1986, **
Derrell Dunn	MSEE	August 1986
Ahgit Ganguli	MSEE	June 1987
Franklin Hooker	MSEE	December 1987
Joanne Ooi	MSEE	December 1987
Kelvin Brooks	MSEE	May 1988
Frances Flores	MSEE	May 1988
Clay Gloster	MSEE	May 1988, **
Pamela Phillips	MSEE	May 1988
David Wilson	MSEE	August 1988

Abdullah Zubaid	MSEE	December 1988
Christopher Ryan	MSEE	May 1989, **
Radha Ayyaswami	MSEE	September 1989
Berdenia Walker	MSEE	September 1989, **
Denise White	MSEE	September 1989
Ranjani Ram	MSEE	May 1990
David Hampton	MSEE	May 1991
William Thompson	MSEE	May 1991
Tunc Kahveci	MSEE	May 1992
Clay Gloster	Ph.D.	(NCSU), 1993 *, **

* Member of Ph.D. Committee - Cooperative Ph.D. Program with NCSU.

** Former MSEE advisees that have gone on to earn Ph.D. degrees in Electrical Engineering.

PERSONAL DATA:

Date of Birth: October 22, 1951

Family: *Spouse:* Davida, County Attorney for Forsyth County
 Children: Harold, Jr., McKinsey Consulting, Atlanta, GA
 Walter, First Year Dental Student, University of Maryland