

Curriculum Vitae
Derrek Butler Dunn, Ph.D.
P.O. Box 14999
Greensboro, NC 27415-4999
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RESEARCH INTERESTS:

- Research interests include the areas of Wireless Communication Systems, Global Positioning Systems, and Real-Time Information Processing using Acousto-optics.

CURRENT PROFESSIONAL APPOINTMENTS AND REGISTRATIONS:

- Professor and Chairperson for the Electronics, Computer, and Information Technology Department, North Carolina Agricultural & Technical State University
- Regular Graduate Faculty member, Indiana State University Consortium Ph.D. Degree Program in Technology Management
- Member of the International Editorial Review Board of the "International Journal of Modern Engineering"
- Manuscript Reviewer for the European Association for Signal Processing (EURASIP) Journal on Applied Signal Processing
- Manuscript Reviewer for Institute of Electrical and Electronics Engineers' Signal Processing Letters
- Certified Industrial Technologist, National Association of Industrial Technology (NAIT)
- Engineer Class I Certification with Master Endorsement (RF), National Association of Radio and Telecommunication Engineers (NARTE)
- Engineer-in-Training (E.I.T.), State of Virginia
- Member of Guilford Technical Community College's Electronics Engineering Technology Advisory Board
- Visiting Accreditation Team Member for the National Association of Industrial Technology (NAIT)
- Member of the Guilford County Schools College Tech Prep Business Partnership

ADMINISTRATIVE AND PROFESSORIAL DUTIES:

- Supervise job performance of fifteen full-time and nine part-time faculty members, an administrative assistant, and a laboratory technician.
- Make recommendation on full-time faculty salary increases.
- Conduct and lead monthly departmental and bi-annual student town hall meetings.
- Make recommendations for the hiring of all faculty and staff in the department to the Dean of the School of Technology.
- Manage a \$900,000 departmental annual budget, which include salary, equipment, alumni discretionary funds, and miscellaneous expenses.
- Manage funded sponsored research and in-kind grants.

- Teach undergraduate and graduate courses.
- Supervise and guide master's and doctoral students' theses and dissertations.

ADMINISTRATIVE ACCOMPLISHMENTS:

Chairperson, Department of Electronics, Computer, and Information Technology
 North Carolina Agricultural and Technical State University
 Greensboro, NC 27411

- Developed an undergraduate Electrical Power Technology concentration working in concert with various Energy companies.
- Developed the "Notification of Intent to Plan" and "Request for Authorization to Establish" documents to implement a new on-line and face-to-face Master's program in Information Technology, which was approved for implementation for October 2007 by the UNC System Board of Governors.
- Established a Co-op Coordinator position in the ECIT Department.
- Established a Community College Transfer Coordinator position in the ECIT Department
- Facilitated the process of the ECIT Department joining the EMC²'s Storage Academy Program.
- Developed a relationship with Cisco's Black Employees Network to offer outreach workshops and programs to K-12 students.
- Gained approval to re-name the Department of Electronics and Computer Technology to Department of Electronics, Computer, and Information Technology to better reflect program offerings in the department.
- Updated the department's curriculum to include a stronger foundation in mathematics, science, and hands-on laboratory experiences.
- Added two (2) new interdisciplinary concentrations to the department's undergraduate program: concentration in Information Technology, and concentration in Computational Technology.
- Filled the position of Electronics Laboratory Technician, which was vacant for more than two years.
- Implemented an approved UNC-GA on-line Bachelor of Science degree program in Electronics Technology, thus, allowing students to pursue a four-year degree through part-time on-line study.
- Improved professional climate in the department, thereby, fostering a sense of unity among faculty members.
- Increased the number of research proposals submitted by the department.
- Afforded faculty members opportunities for professional growth and development by encouraging them to attend workshops, present at seminars, etc.
- Together with departmental faculty members, presented technical workshops to the local community.
- Expanded the Information Technology concentration of the Department of Electronics, Computer, and Information Technology program with new course offerings.
- Initiated videotaping of face-to-face lectures, can be streamed to distance learning students in corresponding on-line courses.

- Established Articulation Agreements in High Performance Computing between the Department of ECIT and Contra Costa and Wake Technical Community Colleges.
- Implemented, through an E-learning grant, an interdisciplinary program in Information Technology between the Department of Business Education and the Department of Electronics, Computer, and Information Technology.
- Formed a strategic research and educational partnership with the Navigation and Research Facility of the Applied Research Laboratory of The Pennsylvania State University.
- Developed recruitment material promoting on-line programs in the Department of Electronics, Computer, and Information Technology.
- Acted as Interim Chairperson for the Department of Manufacturing Systems from May 11, 2005 to December 17, 2005, while continuing to maintain duties as Chairperson and Professor of the Department of Electronics, Computer, and Information Technology.

Interim Chairperson, Department of Manufacturing Systems
 North Carolina Agricultural and Technical State University
 Greensboro, NC 27411

- Aided the faculty of the Manufacturing Systems Department in updating the undergraduate curriculum to comply with University Studies.
- Assisted the faculty of the Manufacturing Systems Department in developing departmental Tenure, Promotion and Reappointment guidelines.
- Aided with the creation and printing of new promotional literature advertising the Department of Manufacturing Systems.

ACADEMIC WORK HISTORY:

North Carolina Agricultural and Technical State University August 1998 to Present
 Greensboro, NC 27411

The Department of Electronics, Computer, and Information Technology

- Professor and Chairperson 07/2005 – Present
- Associate Professor and Chairperson 08/2003 – 06/2005
- Associate Professor and Acting Chairperson 01/2003 – 05/2003
- Associate Professor 07/2002 – 01/2003
- Assistant Professor 08/1998 – 06/2002

Tuskegee University August 1997 to May 1998
 Tuskegee, AL 36088

The Department of Electrical Engineering

- Assistant Professor

Radford University
Radford, VA 24142

August 1996 to May 1997

The Department of Mathematics and Statistics

- Instructor

Virginia Polytechnic Institute and State University
Blacksburg, VA 24061-0111

January 1996 to Dec. 1996

The Department of Mathematics

- Adjunct Instructor

08/1996 – 12/1996

The Bradley Department of Electrical Engineering

- Adjunct Instructor

01/1996 – 08/1996

TEACHING EXPERIENCE:

The Department of Electronics, Computer, and Information Technology
North Carolina Agricultural and Technical State University
Greensboro, NC 27411

<u>Semester</u>	<u>Course Number</u>	<u>Course Title</u>
Fall 2007	ECT 198	Freshman Project
	ECT 298	Sophomore Project
	ECT 350	Communications Systems
	ECT 398	Junior Project
	ECT 598	Senior Project
Spring 2007	ECT 198	Freshman Project
	ECT 298	Sophomore Project
	ECT 350	Communications Systems
	ECT 398	Junior Project
	ECT 598	Senior Project
	ECT 740	Regulatory and Policy Issues for Comm. Sys.
	ITT 635	Administration and Security of WLAN I
ITT 752	Advanced Computer Forensics	
Fall 2006	ECT 121	Electronic Circuit Fabrication Techniques
	ECT 298	Sophomore Project
	ECT 350	Communications Systems
	ECT 398	Junior Project
	ECT 598	Senior Project
	ECT 740	Regulatory and Policy Issues for Comm. Sys.
	ITT 646	Wireless Computer Networking I

	ITT 702	Analytical Methods for Information Technology
Spring 2006	ECT 350 ECT 398 ECT 598 ITT 665 ITT 745 ITT 765	Communications Systems Junior Project Senior Project Wireless Geo-Location System I Network Services for the Enterprise Wireless Geo-Location Systems II
Fall 2005	ECT 121 ECT 350 ECT 398 ECT 598 ITT 640 ITT 725	Electronic Circuit Fabrication Techniques Communications Systems Junior Project Senior Project Administration and Security of WLAN II Wide Area Networks
Spring 2005	ECT 350 ECT 598 ITT 601 ECT 665	Communications Systems Senior Project Wireless Communication Systems Wireless Geo-Location Systems I
Fall 2004	ECT 350 ECT 598 ECT 600 ECT 740 ECT 620	Communications Systems Senior Project Electromechanical Systems Analysis Regulatory and Policy Issues for Communication Telecommunication Management
Spring 2004	ECT 350 ECT 598 ECT 650 ECT 665	Communications Systems Senior Project Wireless Communication Systems Wireless Geo-Location Systems
Fall 2003	ECT 350 ECT 601 ECT 655	Communications Systems Wireless Application Protocol Optical Communication Systems
Spring 2003	ECT 355 ECT 599 ECT 735	Electrical Power & Machinery Independent Study: Wireless Communication Standards Telecommunication Management Issues
Fall 2002	ECT 350 ECT 355 ECT 650 ECT 670 ELEN 459	Communications Systems Electrical Power & Machinery Wireless Communication Systems Communication Circuit Development Laboratory I Digital and Data Communication Systems

Spring 2002	ECT 120	Introduction to Electronics Technology
	ECT 201	Technical Computers II
	ECT 350	Communications Systems
	ECT 730	Systems Integration for Telecommunications Managers
	ELEN 452	Wireless Communication Systems
Fall 2001	ECT 120	Intro. to Electronics Technology
	ECT 201	Technical Computers II
	ECT 314	Active Circuits II
	ECT 350	Communications Systems
Summer 2001	ECT 660	Satellite and Personal Communication Systems
Spring 2001	ECT 211	Electrical Circuits I
	ECT 212	Electrical Circuits II
	ECT 350	Communications Systems
	ECT 655	Optical Communication Systems
	ECT 670	Communication Circuit Development Lab I
	ECT 699	Independent Study in Electronics and Computer
	ELEN 452	Wireless Communication Systems
Fall 2000	ECT 211	Electrical Circuits I
	ECT 212	Electrical Circuits II
	ECT 350	Communications Systems
	ECT 650	Wireless Communication Systems
	ECT 699	Independent Study in Electronics and Computer Technology
		ELEN 452
Summer 2000	ECT 101	Technical Computers I
	ECT 350	Communications Systems
	ECT 650	Wireless Communication Systems
	ECT 660	Satellite and Personal Communication Systems
Spring 2000	ECT 211	Electrical Circuits I
	ECT 212	Electrical Circuits II
	ECT 650	Wireless Communication Systems
	ECT 660	Satellite & Personal Communication Systems
Fall 1999	ECT 120	Introduction to Electronics Technology
	ECT 211	Electrical Circuits I
	ECT 350	Communications Systems

	ECT 650	Wireless Communication Systems
Spring 1999	ECT 211 ECT 350	Electrical Circuits I Communications Systems
Fall 1998	ECT 211 ECT 350	Electrical Circuits I Communications Systems

The Department of Electrical Engineering
Tuskegee University
Tuskegee, AL 36088

<u>Semester</u>	<u>Course Number</u>	<u>Course Title</u>
Spring 1998	Elec. Eng. 221L Elec. Eng 323 Elec. Eng 539	EE Lab I Signals and Systems Wireless Communications
Fall 1997	Elec. Eng. 221L Elec. Eng. 323 Elec. Eng 538	EE Lab I Signals and Systems Communication Theory

The Department of Mathematics and Statistics
Radford University
Radford, VA 24142

<u>Semester</u>	<u>Course Number</u>	<u>Course Title</u>
Spring 1997	Math 103 Math 104	Finite Mathematics College Algebra
Fall 1996	Math 103 Math 104	Finite Mathematics College Algebra

The Department of Mathematics
Virginia Polytechnic Institute and State University
Blacksburg, VA 24061-0111

<u>Semester</u>	<u>Course Number</u>	<u>Course Title</u>
Fall 1996	Math 1015	Calculus I

The Bradley Department of Electrical Engineering
Virginia Polytechnic Institute and State University
Blacksburg, VA 24061-0111

<u>Semester</u>	<u>Course Number</u>	<u>Course Title</u>
Spring 1996	EE 3204	Electronics II
Summer 1996	EE 3054	Electronics Theory

INDUSTRIAL EXPERIENCE:

Oak Ridge National Laboratory
Oak Ridge Associated Universities
Oak Ridge, TN 37831
May 2003 to August 2003

HBCU and MEI Summer Research Faculty
• Performed research investigation on Software Radio Development using MATLAB.

Navigation Research and Development Center
Applied Research Laboratory at The Pennsylvania State University
995 Newton Road, Warminster, PA 18974
May 2002 to August 2002

Summer Research Faculty
• Researched global positioning systems using a CAST GPS signal simulator and two ASTECH GPS receivers.

Navigation Research and Development Center
Applied Research Laboratory at The Pennsylvania State University
995 Newton Road, Warminster, PA 18974
May 2001 to August 2001

Summer Research Faculty
• Involved in global positioning system research using a CAST GPS signal simulator and two ASTECH GPS receivers.

Applied Research Laboratory
The Pennsylvania State University
P.O. Box 30, North Atherton Street
State College, PA 16801
May 1999 to Aug. 1999

Summer Research Faculty
• Analyzed environmental research data from a LIDAR system which measured ozone, water vapor and particulate matter in the lower atmosphere.

Hewlett-Packard Labs
3500 Deer Creek Road
May 1998 to August 1998

Palo Alto, CA 94086

University Faculty Hire

- Designed and tested an analog oscillator for a RFID tag radio transmitter

EDUCATION:

Doctor of Philosophy in Electrical Engineering, June 1998
The Bradley Department of Electrical Engineering
Virginia Polytechnic Institute and State University
Blacksburg, VA

Master of Science in Mathematics, May 1995
The Department of Mathematics
Virginia Polytechnic Institute and State University
Blacksburg, VA

Master of Science in Electrical Engineering, May 1993
The Bradley Department of Electrical Engineering
Virginia Polytechnic Institute and State University
Blacksburg, VA

Bachelor of Science in Electrical Engineering, December 1990
North Carolina Agricultural and Technical State University
Greensboro, NC

Bachelor of Science in Mathematics, December 1989
North Carolina Agricultural and Technical State University
Greensboro, NC

PROFESSIONAL SOCIETIES:

- National Association of Power Engineers (NAPE) (2007 to Present)
- International Association of Radio and Telecommunication Engineers (iNARTE) (2000 to Present)
- American Society for Engineering Education (1999 to Present)
- National Association of Industrial Technology (NAIT) (1998 to Present)
- Pi Mu Epsilon, The National Mathematics Honor Society (1988 to Present)
- Institute of Electrical and Electronics Engineers (IEEE) (1987 to Present)
- Alpha Chi Sophomore Honor Society (1987 to Present)
- Alpha Lambda Alpha Freshman Honor Society (1986 to Present)

SPONSORED RESEARCH AND IN-KIND EQUIPMENT GRANTS:

- Focus Growth Award for Development of an on-line Graduate Program in Information Technology \$70,000, (The Office of the President of the University of North Carolina), March 1, 2006 to June 30, 2008, PI
- Undergraduate Scholarships for Global Positioning System Research \$120,000.00 (Office of Naval Research) 2002/2003 to 2006/2007 Academic Years, PI
- Wireless Indoor Position Location System \$298,000.00 (NASA Kennedy) 2001/2002 to 2006/2007 Academic Years, PI
- Graduate Fellowship in GPS/Inertial Navigation (GPS-IN) Research for Kendra Johnson, \$4,000 (North Carolina Space Grant Consortium, NCSU) 03/14/2005 to 3/14/2006, PI
- Water Vapor Profiling using a Global Positioning System (GPS) Receiver \$2,000.00, (North Carolina State University), 03/01/2004 to 02/28/2005, PI
- Techniques for High Precision GPS Point Positioning Using Inertial Navigation Aids (GPS-PINA) \$89,782.00, (National Imagery and Mapping Agency), 09/16/03 to 09/15/05, PI
- EPA NIA Undergraduate Student Fellowship for Danielle Goode \$27,196.00, (Environmental Protection Agency), 08/01/03 to 04/30/05, PI
- Collaborative 2+2 on-line Information Technology Degree Program Expansion Grant \$86,512, (The Office of the President of the University of North Carolina), April 1, 2004 to June 30, 2004, PI
- Wireless Radio Location (WRL) Systems Development Project \$4,000.00 (North Carolina Space Grant Consortium) 2003/2004 Academic Year(s), PI
- Instructional and Research Laboratory for Optical Communication Networking \$15,000.00 (Lucent Technologies) 2002/2003 Academic Year, PI
- Visiting Industrial Scholar Request for Dr. Ruthie D. Lyle at N.C. A&T State University \$600.00 (Oak Ridge Associated Universities) 2002/2003 Academic Year, PI
- Instrumentation for a Wireless Geo-location and Global Positioning Research Laboratory \$203,395.00 (Air Force Office of Scientific Research) 2002/2003 to 2003/2004 Academic Year(s), PI
- EPA Minority Institution Academic Undergraduate Student Fellowship (Jackie Green) \$23,373.00 (EPA) 2002/2003 to 2003/2004 Academic Year(s), PI
- Distance Learning Development Laboratory at N.C. A&T State University \$12,399.00 (Hewlett-Packard National Contributions Program) 2001/2002 Academic Year, PI
- Refurbishment of a Sound Detection and Ranging (SODAR) Instrument \$13,501.00 (Environmental Protection Agency/Penn State University) 1999/2000 Academic Year, PI
- RF and Microwave (RFAM) Circuit Design Laboratory at N.C. A&T State University (Second Installment) \$237,870.00 (Agilent Technologies University Grants Program) 1999/2000 Academic Year, PI
- Wireless Communication Laboratory at N.C. A&T State University \$125,000.00 (Lucent Technologies) 1999/2000 Academic Year, CO-PI
- RF and Microwave (RFAM) Circuit Design Laboratory at N.C. A&T State University (First Installment)

\$299,355.00 (Hewlett-Packard University Grants Program) 1998/1999 Academic Year,
PI

REVIEWER:

- Manuscript reviewer for the European Association for Signal Processing (EURASIP) Journal on Applied Signal Processing
- Manuscript reviewer for Institute of Electrical and Electronics Engineers' Signal Processing Letters

PUBLICATIONS:

Textbooks:

- *Fundamental Mathematics for Electronics and Information Technology*, First Edition by DeWayne Brown and **Derrek B. Dunn**, Published by Copley Custom Textbooks, 2008, ISBN 1-58152-578-8.
- *Mathematics for Technologist in Electronics*, Second Edition by DeWayne Brown and **Derrek B. Dunn**, Published by Pearson Custom Publishing Company, 2002, ISBN 0-536-68102-3.
- *Mathematics for Technologist in Electronics*, First Edition by DeWayne Brown and **Derrek B. Dunn**, Published by Pearson Custom Publishing Company, 2002, ISBN 0-536-61109-2.

Journal Articles:

- Ji Yao Shen and **Derrek Dunn**, *Impacts of Information Technology on Manufacturing*, Journal of Industrial Technology. [Submitted]
- Yun Shen, **Derrek Dunn**, DeWayne Brown, Walter Gilmore, Ronnie Rollins, Angela Lemons, *The Differences Between Internet Protocol Version 4 (IPV4) and Internet Protocol Version 6 (IPV6)*, International Journal of Modern Engineering, [Submitted]
- Ji Yao Shen, **Derrek Dunn**, and Yun Shen, *Challenges Facing US Manufacturing and Strategies*, Journal of Industrial Technology, [Accepted for publication]
- Cynthia Carlton Gillispie-Johnson, **Derrek B. Dunn**, DeWayne Brown, and Vincent W. Childress, "Establishing a Computer-Mediated Communication Laboratory in a Graphic Communications Department", Visual Communications Journal 2002, p. 34-37.
- Jiangang Xia, **Derrek B. Dunn**, and Ting-Chung Poon, "Image Edge Enhancement by Bragg Diffraction", Optics Communications vol.128 p.1-7, July, 1996.

Conference Papers:

- Keith Schimmel, **Derrek B. Dunn**, Vereda King, Stephanie-Luster-Teasley, Stephen McCary-Henderson, G.B. Reddy, Abolghasem Shahbazi, Harmohindar Singh, Valmi Sousa, Guoqing Tang, Godfrey Uzochukwu, and Kenneth Murray, "Graduate Learning at the Interface of Science, Engineering, and Business - The Energy and Environmental

Studies Program at North Carolina Agricultural and Technical State University”, Proceedings of the 4th Global Colloquia on Engineering Education, 2005

- DeWayne Brown, and **Derrek B. Dunn**, Trajectory Visualization by Using Global Positioning Systems (GPS), IEEE Southeastcon '05, April, 2005
- **Derrek B. Dunn**, DeWayne Brown, and Thomas Avery, "*Advancing Technology in Wireless Communications, Part II*", IEEE Southeastcon '02, April, 2002
- **Derrek B. Dunn**, "*An RFID/IPS Indoor Positioning System*", The Thirty-First Southeastern Symposium on System Theory (SSST99), March 21-23, 1999
- Yolanda McLeod and **Derrek B. Dunn**, "*Advancing Technology in Wireless Communications*", IEEE Southeastcon '98, April 24-26, 1998
- **Derrek B. Dunn**, Jiangang Xia and Ting-Chung Poon, "*Design and Use of a Cascaded Acousto-Optic Image Processing System as a Bandpass and Bandstop Image Processing Filter*", IEEE Southeastcon '97, April 12-14, 1997
- **Derrek B. Dunn**, Jiangang Xia and Ting-Chung Poon, "*Three Dimensional Analytical and Numerical Solutions for Acousto-Optic Interaction*", The Twenty-Ninth Southeastern Symposium on System Theory (SSST97), March 9-11, 1997
- **Derrek B. Dunn**, Jiangang Xia and Ting-Chung Poon, "*The Function of the Sound Wave in an Acousto-Optic Image Processing System*" Proceedings of the IEEE Southeastcon '96, April 11-14, 1996
- **Derrek B. Dunn**, Jiangang Xia and Ting-Chung Poon, "*High Frequency Noise Reduction Using an Acousto-Optic Image Processing System*", Proceedings of The Twenty-eighth Southeastern Symposium on System Theory (SSST96), March 31-April 2, 1996
- **Derrek B. Dunn**, "*Verification of the Solutions of the Paraxial Wave Equation for Optical Diffraction through a Rectangular Aperture in the Fresnel Region*", Proceedings of The Engineering and Architecture Symposium at Prairie View A&M University (E&A '96 Symposium), February 5-6, 1996

Oral Presentations:

- Michael Wright, Dion Stallings, and **Derrek B. Dunn**, "*The Effectiveness of Global Positioning Systems Electronic Navigation*", IEEE SoutheastCon 2003, April 4-6, 2003
- Jackie Green, and **Derrek B. Dunn**, "*Profiling the Boundary Layer using A Sound Detection and Ranging (SODAR) unit*", IEEE SoutheastCon 2003, April 4-6, 2003
- Danielle Goode, and **Derrek B. Dunn**, "*Implementation of an Amplitude Modulation Transceiver using Log and Antilog Amplifiers*", IEEE SoutheastCon 2003, April 4-6, 2003
- Michael Wright, Angela Marks and **Derrek B. Dunn**, "*Design of an Optical Transceiver*", Sixth Annual Undergraduate Research Conference North Carolina Louis Stokes Alliance for Minority Participation (NC-LSAMP), North Carolina State University, April 26, 2002
- **Derrek B. Dunn**, Jiangang Xia and Ting-Chung Poon, "*Design and Implementation of a Cascaded Acousto-Optic Image Processing System*" The Optical Society of America (OSA) Annual Meeting, Rochester, NY; October 20-25, 1996
- **Derrek B. Dunn**, Jiangang Xia and Ting-Chung Poon, "*Design of an Acousto-Optic Image Processing System to Perform Image Edge Enhancement Using Bragg*

Diffraction" IEEE Virginia Mountain Section Technical Mini-Symposium 96, May 23, 1996

Poster Presentations:

- Dion Stallings, **Derrek B. Dunn**, and DeWayne Brown, "*Evaluating the CAST-1000 Satellite Signal Simulator using GPS receivers*", 11th Florida-Georgia Louis Stokes Alliance for Minority Participation in Science, Technology, Engineering and Mathematics, Jan. 29 to Feb. 1, 2004
- Danielle Goode, **Derrek B. Dunn**, and DeWayne Brown, "*Comparison of a Global Positioning System (GPS) Sensor Parameters using a CAST GPS Constellation Simulator*", 11th Florida-Georgia Louis Stokes Alliance for Minority Participation in Science, Technology, Engineering and Mathematics, Jan. 29 to Feb. 1, 2004
- Angela Marks, **Derrek B. Dunn**, and DeWayne Brown, "*Comparison of a Vehicles Performance Parameters using an Inertial Navigation Device*", 11th Florida-Georgia Louis Stokes Alliance for Minority Participation in Science, Technology, Engineering and Mathematics, Jan. 29 to Feb. 1, 2004
- Michael Wright, Angela Marks, and **Derrek B. Dunn**, "*The Efficiency of Electronic Navigation*", 6th Annual DOE EPSCoR and LS-LAMP Research Conference, November 1-3, 2002
- Vernita Bryant, and **Derrek B. Dunn**, "*Receiver Noise Test*", 6th Annual DOE EPSCoR and LS-LAMP Research Conference, November 1-3, 2002
- Stacy Raynor, Dion Stallings, and **Derrek B. Dunn**, "*Position Accuracy of an Ashtech G8 GPS Sensor and an Earthmate GPS Receiver*", 6th Annual DOE EPSCoR and LS-LAMP Research Conference, November 1-3, 2002
- Vernita Bryant, and **Derrek B. Dunn**, "*Receiver Independent Exchange Format*", First Annual Opt-ed Alliance Day, September 20, 2002
- Michael Wright, Angela Marks, and **Derrek B. Dunn**, "*Using a GPS Receiver as an Effective Means of Navigation*", First Annual Opt-ed Alliance Day, September 20, 2002
- Dion Stallings, Stacy Raynor, and **Derrek B. Dunn**, "*Ashtech G8 GPS OEM Board*", First Annual Opt-ed Alliance Day, September 20, 2002
- Michael Wright, Angela Marks, and **Derrek B. Dunn**, "*Design of an Optical Transceiver*", Sixth Annual Undergraduate Research Conference North Carolina Louis Stokes Alliance for Minority Participation, April 26, 2002
- Dion Stallings and Stacy Raynor, and **Derrek B. Dunn**, "*Implementation of a Bandpass Filter using Microstrip Technology for a Wireless LAN*", NAFEO High Tech Student Expo 2002, Washington, DC, March 21, 2002
- Michael Wright, Angela Marks, and **Derrek B. Dunn**, "*Security Aspects of an Optical Transceiver for Telecommunication Applications*", NAFEO High Tech Student Expo 2002, Washington, DC, March 21, 2002
- Angela Marks, Michael Wright and **Derrek B. Dunn**, "*Implementation of an Optical Transceiver for Telecommunication Applications*", Ron McNair Symposium, North Carolina A&T State University, January 28, 2002
- Angela Marks, Michael Wright and **Derrek B. Dunn**, "*Wireless RS-232 Laser Transceiver for Secure Computer Network Communications*", EMERGE Workshop 2001, Georgia Tech, November 29, 2001

- Trina Posey, Terrance Blackmon, Justin Taylor and **Derrek B. Dunn**, "*TDMA vs. CDMA, Which will be the Access Technology of the Future*", Fifth Annual Undergraduate Research Conference North Carolina Louis Stokes Alliance for Minority Participation (NC-LSAMP), North Carolina A&T State University, April 20, 2001
- Wayne Morrison, Kennedy Cheruiyot and **Derrek B. Dunn**, "*What is NAMPS (Narrowband Advanced Mobile Phone Service)?*", Fifth Annual Undergraduate Research Conference North Carolina Louis Stokes Alliance for Minority Participation (NC-LSAMP), North Carolina A&T State University, April 20, 2001
- Bryan Mason, Chico Foxx, Hayes Bowling III and **Derrek B. Dunn**, "*Optical Routers and their improved performance in relations to LANs and WANs*", Fifth Annual Undergraduate Research Conference North Carolina Louis Stokes Alliance for Minority Participation (NC-LSAMP), North Carolina A&T State University, April 20, 2001
- David Jones, Louis Tyson and **Derrek B. Dunn**, "*Wireless Communication Comparisons Between Bluetooth, Jini, and Salutation Protocols*", Fifth Annual Undergraduate Research Conference North Carolina Louis Stokes Alliance for Minority Participation (NC-LSAMP), North Carolina A&T State University, April 20, 2001
- Wilson Skipwith, Terrell Goudy and **Derrek B. Dunn**, "*Digital versus Analog*", Fifth Annual Undergraduate Research Conference North Carolina Louis Stokes Alliance for Minority Participation (NC-LSAMP), North Carolina A&T State University, April 20, 2001
- Issac M. Black, Bert A. Davis, Candice Coltrane, Courtney Amos, Shedrick Bessent, Jason Sherrill, Roderick Bradford, John Dingle and **Derrek B. Dunn**, "*Time Division Multiple Access (TDMA) versus Code Division Multiple Access (CDMA) for use as an Access Technology*", Fifth Annual Undergraduate Research Conference North Carolina Louis Stokes Alliance for Minority Participation (NC-LSAMP), North Carolina A&T State University, April 20, 2001
- Ronetta Mosby and **Derrek B. Dunn**, "*Digital Communication Using Frequency-Shift Keying*", Fifth Annual Undergraduate Research Conference North Carolina Louis Stokes Alliance for Minority Participation (NC-LSAMP), North Carolina A&T State University, April 20, 2001
- Naidra Hemingway and **Derrek B. Dunn**, "*Application of Passive Networks for Voltage Signal Waveform Shaping*", Fourth Annual Undergraduate Research Conference North Carolina Louis Stokes Alliance for Minority Participation (NC-LSAMP), Winston-Salem State University, April 14, 2000
- Raschad E. Hines and **Derrek B. Dunn**, "*Application of Rheostats and Potentiometers*", Fourth Annual Undergraduate Research Conference North Carolina Louis Stokes Alliance for Minority Participation (NC-LSAMP), Winston-Salem State University, April 14, 2000
- Rosette V. Ladson and **Derrek B. Dunn**, "*Applications of Passive Networks for Measuring Resistive Circuit Elements*", Fourth Annual Undergraduate Research Conference North Carolina Louis Stokes Alliance for Minority Participation (NC-LSAMP), Winston-Salem State University, April 14, 2000
- Ronetta Mosby and **Derrek B. Dunn**, "*Design and Applications of Passive Filter Networks*", Fourth Annual Undergraduate Research Conference North Carolina Louis Stokes Alliance for Minority Participation (NC-LSAMP), Winston-Salem State University, April 14, 2000

- Melanie Ellis, Adrain L. Martin, and **Derrek B. Dunn**, "*Communication Circuits Simulation Programs used in the RF & Microwave Circuit Design Lab at North Carolina A&T State University*", Third Annual Undergraduate Research Conference North Carolina Louis Stokes Alliance for Minority Participation (NC-LSAMP), North Carolina Central University, April 16, 1999
- Nicole Wilson, Jamila Moore, and **Derrek B. Dunn**, "*Implementation of the RF & Microwave Circuit Design Lab at North Carolina A&T State University*", Third Annual Undergraduate Research Conference North Carolina Louis Stokes Alliance for Minority Participation (NC-LSAMP), North Carolina Central University, April 16, 1999

SUPERVISED DOCTORAL STUDENTS:

- Mr. Muhammad Al-Humaigani, Ph.D. in Technology Management Candidate, Proposed Graduation Date: May 2008, Indiana State University Consortium Ph.D. Degree program in Technology Management, Project Topic: Security Transition Roadmap to 4G and Future Generations Wireless Networks.
- Mr. David Fusco, Ph.D. in Technology Management Candidate, Proposed Graduation Date: May 2009, Indiana State University Consortium Ph.D. Degree program in Technology Management, Dissertation Topic: To Be Determined.
- Mr. Hari Kuchibhotla, Ph.D. in Technology Management Candidate, Proposed Graduation Date: May 2010, Indiana State University Consortium Ph.D. Degree program in Technology Management, Dissertation Topic: To Be Determined.
- Mr. Kevin Olsen, Ph.D. in Technology Management Candidate, Proposed Graduation Date: May 2010, Indiana State University Consortium Ph.D. Degree program in Technology Management, Dissertation Topic: To Be Determined.
- Mr. Kevin Liao, Ph.D. in Technology Management Candidate, Proposed Graduation Date: May 2010, Indiana State University Consortium Ph.D. Degree program in Technology Management, Dissertation Topic: To Be Determined.

SUPERVISED MASTER'S STUDENTS:

- Ms. Raquel Roche, MSIT in Electronics and Computer Technology Candidate, Graduation Date: May 2009, Project Topic: To Be Determined.
- Ms. Monica Capel, MSIT in Information Technology Candidate, Graduation Date: May 2008, Project Topic: To Be Determined.
- Ms. Chanel Craighead, MS in Information Technology Candidate, Graduation Date: May 2008, Thesis Topic: Wireless Database tracking using RFIDs.
- Ms. Mia Simmons, MSIT in Information Technology Candidate, Graduation Date: May 2008, Project Topic: To Be Determined.
- Ms. Kendra Johnson, MSIT in Information Technology Candidate, Graduation Date: May 2006, Project Topic: Adjacent Channel Inference in a Wireless LAN System.
- Ms. Stacy Raynor, MSIT in Information Technology Candidate, Graduation Date: May 2006, Project Topic: Navigation aiding using an AHRS device.
- Ms. Denetra Rook, MSIT in Information Technology Candidate, Graduation Date: May 2006, Project Topic: Co-Channel Inference in a Wireless LAN System.

- Ms. Vernita Bryant, MSIT in Information Technology Candidate, Graduation Date: May 2004, Project Topic: Analysis of Receiver Induced Position Error using a GPS Simulator.

UNIVERSITY SERVICE:

2007/2008 Academic Year

- The University of North Carolina's Faculty Assembly (N. C. A&T Delegate)
- North Carolina A & T State University's Southern Association of Colleges and Schools (SACS) Reaccreditations Steering Committee (Member)
- School of Technology's Curriculum Committee (Ex Officio)
- School of Graduate Studies' Curriculum Committee (Member)

2006/2007 Academic Year

- The University of North Carolina's Faculty Assembly (N. C. A&T Delegate)
- The University of North Carolina On-line Initiative Quality Assurance Workgroup (Member)
- School of Technology's Curriculum Committee (Ex Officio)
- Adhoc Committee to revise the School of Technology's Strategic Plan (Chair)
- Adhoc Committee to revise the School of Technology's Faculty Handbook (Member)

2005/2006 Academic Year

- The University of North Carolina Faculty Assembly (N. C. A&T Delegate)
- The University Commission on the Intellectual Life of the Campus (Member)
- Search Committee for Director of Computational Science and Engineering Program (Member)
- School of Technology's Curriculum Committee (Ex Officio)

2004/2005 Academic Year

- The University of North Carolina Faculty Assembly (N. C. A&T Delegate)
- The University Commission on the Intellectual Life of the Campus (Member)
- PhD in Energy and Environmental Studies Planning and Implementation Committee (Member)
- Search Committee for Chairperson of the Department of Manufacturing Systems (Chair)
- School of Technology's Curriculum Committee (Ex Officio)

2003/2004 Academic Year

- University of North Carolina Faculty Assembly (N. C. A&T Delegate)

- PhD in Energy and Environmental Studies Planning and Implementation Committee (Member)
- MS in Computational Science and Engineering Planning Committee (Member)
- Search Committee for Vice-Chancellor for Research and Economic Development (Member)
- Search Committee for Chairperson of the Department of Manufacturing Systems (Chair)
- School of Technology's Spring Career Expo (Ex Officio)
- School of Technology's Curriculum Committee (Ex Officio)

2002/2003 Academic Year

- University of North Carolina Faculty Assembly (N. C. A&T Delegate)
- University Undergraduate Honors Program Advisor for Electronics and Computer Technology Department
- University Faculty Senate (Member)
- University Faculty Senate Curricular and New Programs Committee (Chairperson)
- School of Technology's Curriculum Committee (Chairperson)
- School of Technology's Graduate Program Committee (Member)
- School of Technology's Promotion, Tenure, and Reappointment Committee (Member)

2001/2002 Academic Year

- University Committee for Intellectual Property (Member)
- University Task Force on Joint Academic Appointments (Member)
- University Undergraduate Honors Program Electronics and Computer Technology Departmental Advisor
- University Faculty Senate (Member)
- University Faculty Senate Curricular and New Programs Committee (Member)
- School of Technology Curriculum Committee (Chair)
- School of Technology Graduate Program Committee (Member)

2000/2001 Academic Year

- University Committee for Intellectual Property (Member)
- University Task Force on Joint Academic Appointments (Member)
- University Undergraduate Honors Program Electronics and Computer Technology Departmental Advisor
- School of Technology Curriculum Committee (Member)
- School of Technology Graduate Program Committee (Member)

1999/2000 Academic Year

- University Search Committee for Associate Vice Chancellor for Academics Affairs for Technology and Telecommunications (Member)

- University Undergraduate Honors Program Electronics and Computer Technology Departmental Advisor
- School of Technology Search Committee for Director of Distance Learning (Member)
- School of Technology Curriculum Committee (Member)
- School of Technology Master of Science in Industrial Technology, MSIT, Curriculum Committee (Member)

1998/1999 Academic Year

- University's Undergraduate Honors Program Committee (Member)
- School of Technology Curriculum Committee (Member)
- School of Technology Master of Science in Industrial Technology, MSIT, Curriculum Committee (Member)