RONALD D. BOWMAN

email: bowmanr@uah.edu   School: (256) 824-6033

EDUCATION:

Masters of Science, Electrical Engineering
August 1993   GPA 4.00/4.00

Rose-Hulman Institute of Technology Terre Haute, IN
Bachelor of Science, Electrical Engineering
May 1986   GPA 3.34/4.00

Westinghouse School of Applied Engineering Sciences (10 Courses)
May 1990   GPA 3.70/4.00

EXPERIENCE:

2019 – Present	University of Alabama in Huntsville	Senior Lecturer
	Instructor for 3 courses each semester –	CPE211, EE213, CPE348

2005 – 2019   University of Alabama in Huntsville   <u>Lecturer</u>
Instructor for 3 courses each semester –   CPE211(old 112), EE213, EE313,
                                             CPE348(old CPE448/548), ENG101

2004 – 2005   Extemporal Wireless, Inc. Gainesville, FL   <u>Engineer</u>
Developed network layer models for a new wireless communication scheme. Work was performed using the NS-2 simulator and writing C++ code.

2001 – 2004   University of Alabama in Huntsville   <u>Part Time Instructor</u>
Instructor for one section of the C++ Introduction to Programming course

1999 – 2001   **Clemson University** Clemson, SC   <u>Graduate Student</u>
Research work involving multicast protocol development for frequency-hop based multiple-hop wireless networks. Protocols are modeled and simulated using OPNET.

1997 – 1999   **Techno-Sciences, Inc.** Pendleton, SC   <u>Staff Engineer</u>
- Developed, modified and simulated, utilizing OPNET, a media access control (MAC) protocol for a frequency-hop based military packet radio network.
- Developed, modified and simulated, using OPNET, a network level routing protocol for a frequency-hop based military packet radio network.
- Developed an OPNET animation routine for illustrating simulation results of a network consisting of the above packet radios.
- Performed System Administration for Digital UNIX and NT workstations.

1994 – 1997   **Clemson University** Clemson, SC   <u>Graduate Teacher of Record</u>
- Instructor for the non-majors electrical engineering course covering topics in diodes, transistors, magnetic circuits, OP-Amps, transformers, AC and DC machines.
- Instructor for the first course in Electronics (summer 96), Probability and Random Processes (spring 97) and Signals and Systems (summer 97).

1991 – 1994   **Clemson University** Clemson, SC   <u>Graduate Teaching Assistant</u>
- Received the ECE Graduate Teacher of the Year Award 1994
- Strengthened interpersonal communication skills and teaching skills
- Responsible for teaching four lab periods each semester.

1986 - 1991	**Westinghouse Electric Corporation, Electronic Systems Group**
	Baltimore, Maryland <u>Associate Design Engineer</u>

- Designed, simulated and tested switch-mode power supplies for military aircraft.
- Performed trade off studies in areas of components, weight and power.
- Performed troubleshooting on the power system of the advanced warning airborne command system (AWACS) radar processing cabinet.

PROFESSIONAL:

December 2008:   Received Instructional Mini-Grant Award entitled "Increasing Enrollment in CPE 112 Honors Laboratory and the Computer Engineering Program" for the Fall 2009 semester. $2020

PUBLICATIONS: "Automated Feedback for Personalized Learning,"   David Coe, Ronald Bowman, Jason Winningham, 2014 Frontiers in Education: Computer Science and Computer Engineering (FECS'14), WORLDCOMP 2014, July 21-24, 2014, Las Vegas, NV.

R. D. Bowman and C. W. Baum, "A Multicasting Protocol Using Transmitter-Directed Frequency-Hop Signaling for Multiple-Hop Wireless Networks," Proceedings of the 2000 IEEE Military Communications Conference (MILCOM), October 2000.

R. D. Bowman and H. B. Russell "Route Selection for Data Packets in a Tactical Packet Radio Network Using Integrated Voice and Data Transmissions," Proceedings of the 1999 IEEE Military Communications Conference (MILCOM), October 1999.

R. D. Bowman and H. B. Russell "Forwarding Data Packets in an Integrated Voice and Data Packet Radio Network," Proceedings of the 1999 IEEE Pacific Rim Conference on Communications, Computers and Signal Processing (PACRIM '99), August 1999.

R. D. Bowman and H. B. Russell "Channel Access for Simultaneous Voice and Data Transmissions in a Multiple-Hop Packet Radio Network," Proceedings of the 1998 IEEE Military Communications Conference (MILCOM), October 1998.

R. D. Bowman, et al, "Improved Performance for Integrated Voice and Data in a Tactical Packet Radio Network," Proceedings of the 1998 IEEE Military Communications Conference (MILCOM), October 1998.

AWARDS: Tau Beta Pi (UAH chapter) Most Outstanding Professor of the Department of Electrical and Computer Engineering Awarded April 2016
Alan Griffith Stanford Fellowship 1993 – 1996
Industrial Graduate Fellowship 1991 – 1993
Rose–Hulman Academic Scholarship 1982 – 1986
Graduated Cum Laude
Class honors junior and senior years

SERVICE ACTIVITIES: CPE Program ABET coordinator 2010-Present,
Mentor for Meridianville Middle School Robotics Team 2014-Present
Tutor for Student Success Center Tutor Blitz every semester,
Blood donor, Apheresis donor, Build wheel chair ramps for CASA,
Faculty Advisor for Reverse Engineering Club Fall 2019 - Present
Faculty Advisor for Electric Vehicle Club Spring 2022 - Present

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Faculty Advisor for VEX-U Robotics Club – Fall 2019 - Present
Faculty Advisor for Waterfight Club – Fall 2022 - Present