

Curriculum Vitae

I. Professional Background

Name: Dennis Hite
Department: Electrical and Computer Engineering
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M.S.E. in Electrical Engineering (2005) University of Alabama in Huntsville

Bachelors of Science (Physics Major) (1998) Purdue University

II. Teaching Activities: Summary list of courses taught, theses advised

EE100 Fundamentals of Computer, Electrical, and Optical Engineering
EE100L Fundamentals of Computer, Electrical, and Optical Engineering Laboratory
EE213 Electrical Circuits I
EE202 Introduction to Digital Logic Design
EE410 MATLAB, Measurement, and Project Design
CPE449L Introduction to Information Assurance Laboratory
EE494 Electrical Engineering Design Projects
OPE 460 Optical Engineering Design II

III. Teaching materials developed:

In 2014 I developed a new course titled "MATLAB, Measurement, and Project Design". The material included course notes and hands on exercises. The course was well received by the students and two sections were offered in the summer 2014 and 2015.

I worked with Dr Charles Corsetti in an effort to reorganize the EE Senior Design course which included developing sources of external funding to support the course. The external funding has been tied to outreach projects and resulted in several successful senior projects.

I have developed a set of lectures that are delivered via a Tablet PC and LCD projector for the EE202 Introduction to Digital Logic Design course. I have also restructured the Sections I teach to include a Hardware Development Language project in step with current design trends.

I have developed a set of lectures that are delivered via a Tablet PC and LCD projector for the EE100 Fundamentals of Computer Electrical and Optical Engineering course. The material includes theory and real world examples utilizing the World Wide Web and computer programs for simulations.

I have developed and coordinate what I have coined the "Computer, Electrical, and Optical Engineering Freshman Lecture Series". The lectures encourage interaction between faculty and students and integrate research and learning.

I have co-authored Laboratory manual for EE100 (Fundamentals of Computer, Electrical, and Optical Engineering).

I have co-authored the textbook currently used in EE100 (Fundamentals of Computer, Electrical, and Optical Engineering).

I assisted in setting up a new network laboratory for CPE448 (Introduction to Computer Networks). During which I edited and contributed to the laboratory experiments for the new laboratory.

I edited and made several contributions to the laboratory exercises for CPE449 (Introduction to Information Assurance Engineering).

I created and configured a set of laboratory Virtual Machines for the CPE449 (Introduction to Information Assurance Engineering), that can be used to complete assignments offsite.

IV. Student Mentoring:

In the summer 2014 I participated in the Research and Creative Experience for Undergraduates Program with undergraduate student William Isaac Daniel. William worked on the ECE Smart Kart which is a wireless electric kart developed by electrical engineering senior design teams over several semesters.

In the spring 2012 and spring 2013 terms I mentored three EE senior design projects, the salt-water antenna, the ECE Smart Kart, and the LuxAphone. The projects are used at the university open house and other recruiting events.

I employed and mentored Colin Murphy, an undergraduate student, Aug 2009 – Aug 2010. His efforts led to the development of two functional electromagnetics experiments and a proposal submission to the NSF TUES program.

I participated in mentoring an EPSCoR Intern, Mr. McDuffy Pettway, on his summer 2007 project. His project was presented at the EPSCoR/ALSAMP Summer Research Conference, July 2007 at UAB.

V. Research, Creative, and Scholarly Activity:

Books and Manuals:

Fundamental Concepts in Electrical and Computer Engineering with Practical Design Problems, Reza Adhami, Peter Meenen, III, and Dennis Hite, Universal Publishers, Boca Raton, Florida, 2007.

Laboratory Tutorials and Exercises for Entry-Level Computer, Electrical, and Optical Engineers Contributors: Reza Adhami, Damien Galzi, Dennis Hite, Yoshito Kanomori, Mahesh Nalasani and Desmond Tan, Electrical and Computer Engineering Department, Spring 2007.

Concepts in Digital Signals and Systems Laboratory Manual Mahesh Nalasani and Dennis Hite, Electrical and Computer Engineering Department, August 2004.

Electrical Engineering Laboratory Explorations, 4th Edition, Mukhter Ali, Dennis Hite, and Reza Adhami, Electrical and Computer Engineering Department, July 2000.

Refereed Journal Articles:

Dennis Hite , Colin Murphy , Nagendra Singh (2014). "A Relatively Inexpensive 5.8 Ghz Microwave System for Exploring Electromagnetic Phenomena in Laboratories," *Universal Journal of Engineering Science*, 2 , 43 - 48. doi: 10.13189/ujes.2014.020202.

Dennis Hite, Timothy B. Boykin, Nagendra Singh, and Dashen Shen, "A Simple Fermi-Dirac Integration Circuit," *American Journal of Physics*, 73, p. 856, (2005).

Timothy B. Boykin, Dennis Hite, and Nagendra Singh, "The two-capacitor problem with radiation," *American Journal of Physics*, 70, p. 415, (2002).

C. Lengacher, S. Macklin, D. Hite, and M. F. Masters, "Low cost CCD detectors for spectroscopy," *American Journal of Physics*, 66, p. 1025, (1998).

Dennis Hite, M. Deebel, E. Thoreson, C. Lengacher, R. R. Miers, and M. F. Masters, "Construction of a heat pipe oven on a low budget," *American Journal of Physics*, 65, p. 1017, (1997).

Conference Papers:

Aleksandar Milenkovic, Milena Milenkovic, Emil Jovanov, Dennis Hite, and Dejan Raskovic, "An Environment for Runtime Power Monitoring of Wireless Sensor Network Platforms," in *Proceedings of the 37th Southeastern Symposium on System Theory (SSST)*, Tuskegee, AL, March 2005, pp. 406 - 410.

VI. Grants/Donations:

2015: Applied for grant and awarded \$5000 from the Tennessee Valley Authority (TVA) to support senior design outreach projects.

2014: Applied for grant and awarded \$5000 from the Tennessee Valley Authority (TVA) to support senior design outreach projects.

2013: I received an equipment donation from Synapse Wireless valued at \$700 in support of EE Senior Design projects.

2013: Applied for grant and awarded \$4000 from the Tennessee Valley Authority (TVA) to support senior design outreach projects including the ECE Smart Kart

2012: Applied for grant and awarded \$5000 from the Tennessee Valley Authority (TVA) to support senior design outreach projects including the ECE Smart Kart

2012: Working with the University Advancement office I received a \$300 donation from Bentley Automotive group in support of the wireless buggy project.

2012: I received a \$600 donation from the IEEE EMC Society-Huntsville Chapter in support of the salt-water antenna project.

2011: I received an equipment donation from Wyle Laboratories valued at \$3,500 in support of a new Electromagnetics Lab.

2009: Awarded ECE Research Enhancement Program Grant (Aug. 2009 to Aug. 2010), to develop lab exercises related to the department's Electromagnetics courses

VII. Honors, Awards, and Special Recognitions:

Student Government Association Outstanding Faculty Award (UAH 2009-2010)

Outstanding Graduate Student (Masters Level) Department of Electrical and Computer Engineering (UAH 2005)

Outstanding Staff Award Department of Electrical and Computer Engineering (UAH 1999)

Distinguished Physics Major Award Department of Physics (IPFW 1997)