

Natalie Beitel White

CONTACT 330 Kelly Hall Phone (personal): (615) 971-9179
INFORMATION Department of Biomedical Engineering and Mechanics
Virginia Polytechnic Institute and State University E-mail: nbwhite@vt.edu
Blacksburg, Virginia 24061

RESEARCH Medical Devices, Irreversible Electroporation, Bioelectronics, Pulsed Electric Fields
INTERESTS

EDUCATION **Virginia Polytechnic Institute and State University**, Blacksburg, Virginia, USA
Direct PhD, Electrical Engineering **Expected May 2021**

- Advisor: Rafael V. Davalos
- GPA: 3.92

University of Tennessee, Knoxville, Tennessee, USA
BS, Honors Electrical Engineering **May 2016**

- GPA: 3.76

PROFESSIONAL **Virginia Polytechnic Institute and State University**, Blacksburg, Virginia
EXPERIENCE *Graduate Research Assistant* **Fall 2016 – Present**
Improving treatment planning models for irreversible electroporation (IRE) cancer therapy, investigating immune response invoked by IRE in human patients, designing custom electronics for IRE Smart Probe Development.

Graduate Teaching Assistant **Fall 2016, Spring 2017**

- ECE 3614: Introduction to Communication Systems (Fall 2016)
Responsible for aiding students during open office hours and grading
- Circuits and Electronics Support Group (Spring 2017)
Held office hours for students in six different sophomore- and junior-level circuits and electronics courses

Oak Ridge National Laboratory, Oak Ridge, Tennessee
Undergraduate Intern **Summer 2014, June 2015 - July 2016**
Designed and implemented LabVIEW program for automating high voltage power supply testing; surface-mount soldering, PCB Layout and PSPICE simulations

University of Tennessee, Knoxville, Tennessee
Undergraduate Research Assistant **Spring 2014**
Development of an electronic system to detect apnea in premature infants in the UT Medical Center NICU; programmed a microcontroller to communicate wirelessly between apnea detection and vibration devices.

CONFERENCE PROCEEDINGS
1. Mahbub, I., Hasan, S., Pullano, S. A., Quaiyum, F., Stephens, C. P., Islam, S., Antonio S.F., Gaylord, M. S., Lorch, V., **Beitel N.**, *A Low Power Wireless Apnea Detection System Based on Pyroelectric Sensor*. Biowireless Symposium, 2015

POSTER PRESENTATIONS	<ol style="list-style-type: none"> 1. Beitel, N., M. Nance Ericson, Robert J. Warmack, Charles L. Britton, <i>LabVIEW Tools for High Voltage Power Supply Testing and Characterization</i>, University of Tennessee Women in STEM Symposium, 2016 2. Beitel, N. Mahbub, I., Quaiyum, Islam, S., <i>A Low Power Wireless Apnea Detection System Based on Pyroelectric Sensor</i>, Exhibition of Undergraduate Research and Creative Achievement, 2015 	
HONORS AND AWARDS	William E. Webber Direct PhD Fellow National Academy of Engineering Grand Challenges Scholar Chancellor's Honors Program Graduate Outstanding Junior in Electrical Engineering and Computer Science Outstanding Sophomore in Electrical Engineering and Computer Science Dr. Min H. Kao Scholar Dr. Joseph J. Jacobs Engineering Scholar	2016 2016 2016 2015 2014 2013 2012
WORKSHOPS	IEEE Women in Engineering International Leadership Conference, San Jose, California, USA (May 2015)	
PROFESSIONAL SOCIETIES & STUDENT ORGANIZATIONS	Institute of Electrical and Electronics Engineers (IEEE) IEEE Women in Engineering (IEEE WIE) Society of Women Engineers (SWE) Tau Beta Pi Engineering Honor Society (President of TN Alpha Chapter, 2016) Systems: Women in Electrical Engineering and Computer Science at UT Knoxville (Communications Officer, 2015)	
SKILLS	Programming Languages: C++, Python 2.7-3.6, LabVIEW, MATLAB, Unix shell Software Packages: COMSOL, PSPICE, LTSpice, Eagle, AutoCAD, LaTeX, GIMP	
SERVICE ACTIVITIES	Graduate-Undergraduate Mentorship Program (GUMP) Mentor Virginia Tech ECE Department Elementary School Outreach Title I Elementary School Service Learner MindSET K-12 Outreach Program, Tau Beta Pi Engineering Honor Society	2016 Spring 2016 Spring 2015 2015-2016