# William Laney

10411 Hunter View Rd. Vienna, VA 22181 (703) 944-7337 • williamlaney@yahoo.com • www.williamlaney.com

#### **Education**

#### College of William & Mary

Williamsburg, VA

B.S. Physics with Honors and Mathematics minor

Aug 2014-Jan 2018

- GPA: 3.6
- Dean's List & Alumni Research Prize in Physics (1 awarded annually)
- President, William & Mary Robotics Club
- Electronics Group Leader, TribeSat satellite development program

# **Undergraduate Research**

Sharkduino Williamsburg, VA

Student Researcher/William & Mary Research Experience for Undergraduates (REU)

May 2015-present

- Partnered with Virginia Institute of Marine Science (VIMS) to create an underwater animal tag system
- Prototyped and developed a low power sensor system based on Arduino microcontrollers
- Designed printed circuit boards (PCBs) in Eagle, then assembled them using a solder reflow oven
- Conducted initial deployments of the system on live animals in a semi-controlled environment

## **Technical Work Experience**

#### **BAE Systems, Space Products & Systems**

Manassas, VA

Virginia Microelectronics Consortium (VMEC) Intern

May 2017-present

- Conducted a study of PCB cleaning techniques to improve manufacturing process efficiency
- Created database of radiation exposure of microelectronics during X-ray inspection
- Identified and enacted changes to bring digital radiography system into compliance with MIL-STD-883K
- Participated in KT root cause analysis

### **Acorn Science & Innovation**

McLean, VA

Junior Analyst

May 2015-Aug

- Analyzed long dwell magnetic gradiometer data to discern likely unexploded ordnance (UXO) from clutter
- Used a developmental version of a specialized geographic information system (GIS) with a custom classification toolkit intended for operational use
- Performed workflow analysis, data quality assessment, parameter tuning, and algorithm validation

#### Walter Reed Army Institute of Research (WRAIR)

Silver Spring, MD

Intern, Army Science and Engineering Apprenticeship Program (SEAP)

July 2014-Aug

- Conducted stereology research relating to the development of drugs to protect the brain after exposure to chemical weapon nerve agents
- Analyzed data collected from experimentation
- Presented a poster and abstract on research findings at WRAIR summer research symposium

# Other Work Experience

Tribe TutorZone

Williamsburg, VA

Tutor
Hunter Mill Country Day School

Jan 2017-present Vienna, VA

Assistant teacher

June 2013-Sept

#### Technical Skills

Software: Eagle, R, MATLAB, LATEX, Git, Mathematica, BASH, Microsoft Technology Associate Certifications

Hardware: Soldering, Carpentry, Laser Cutting, 3D Printing, Metal Work

#### **Activities**

Eagle Scout, DJ for campus radio station WCWM, W&M Makerspace Users Board, Alpha Epsilon Pi fraternity