# William Laney

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### Education

## College of William & Mary

Williamsburg, VA

Aug 2014-Jan 2018

B.S. Physics with Honors and Mathematics minor

- 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
- Relevant Coursework:

Electronics, Statistical Data Analysis, Scientific Instrumentation Lab, Electricity & Magnetism I/II

# **Undergraduate Research**

Sharkduino Williamsburg, VA

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

May 2015-Dec 2017

- Prototyped and developed a low power and portable 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
- Reported results in thesis, presentations, and poster sessions; documented progress in a weekly blog

# **Technical Work Experience**

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

Manassas, VA

Virginia Microelectronics Consortium (VMEC) Intern

May-Aug 2017

- 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-Aug 2015

- 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 -Aug 2014

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

## Other Work Experience

Tribe TutorZone Williamsburg, VA

Tutor Jan-Dec 2017
Hunter Mill Country Day School Vienna, VA
Assistant teacher June -Sept 2013

## **Technical Skills**

**Software:** MATLAB, Eagle, R, 5Spice, LATEX, Git, BASH, I<sup>2</sup>C, SPI, Microsoft Technology Associate Certifications

Hardware: Oscilloscope, Digital Multimeter, Logic Analyzer, Power Supplies, Soldering, Laser Cutting

#### **Activities**

Eagle Scout, DJ for campus radio station WCWM, AEII fraternity, IIME Mathematics Honors Society