William Laney

(703) 944-7337 • williamlaney@yahoo.com • www.williamlaney.com

Education

College of William & Mary

Williamsburg, VA

Aug 2014-Jan 2018

B.S. Cum Laude, 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, Practical Computing for Scientists, 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 accelerometer and gyroscope-based sensor system
- Preformed data validation and analysis in MATLAB and R
- 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

May-Aug 2017

Virginia Microelectronics Consortium (VMEC) Intern

- Conducted a statistical 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

- Stereology research supporting drug development for chemical weapon nerve agent countermeasures
- 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, LATEX, Git, BASH, Python, I²C, SPI, Microsoft Technology Associate Certifications

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

Activities

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