

William Laney

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Education

College of William & Mary

B.S. Cum Laude, Physics with Honors and Mathematics minor

Williamsburg, VA

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
 - **Relevant Coursework:**
Electronics, Statistical Data Analysis, Practical Computing for Scientists, Electricity & Magnetism I/II
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Undergraduate Research

Sharkduino

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

Williamsburg, VA

May 2015-Dec 2017

- Prototyped and developed a low power accelerometer and gyroscope-based sensor system
 - Performed data validation and analysis in MATLAB and R
 - Designed 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
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Work Experience

Carnegie Robotics

Engineering Intern

Pittsburgh, PA

Apr 2018-Present

- Developed system level testing frameworks in Python for use in a production environment
- Responsible for designing and implementing printed circuit board (PCB) level electrical tests
- Documented ISO compliant manufacturing processes and procedures

BAE Systems, Space Products & Systems

Virginia Microelectronics Consortium (VMEC) Intern

Manassas, VA

May-Aug 2017

- 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

Junior Analyst

McLean, VA

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)

Intern, Army Science and Engineering Apprenticeship Program (SEAP)

Silver Spring, MD

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
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Technical Skills

Software: MATLAB, Eagle, R, Python, \LaTeX , Git, BASH, 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