

William Laney

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Education

Cornell University

Masters of Electrical and Computer Engineering

Ithaca, NY

Aug 2019-May 2020

College of William & Mary

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

Williamsburg, VA

Aug 2014-Jan 2018

- GPA: 3.6, Dean's List, Alumni Research Prize in Physics
 - President, William & Mary Robotics Club
 - Electronics Group Leader, TribeSat satellite development program
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Work Experience

Carnegie Robotics

Test Engineer

Pittsburgh, PA

Apr 2018-Present

- Designed and deployed printed circuit board (PCB) and system level test fixtures
 - Developed PCBs with Altium to support testing
 - Wrote testing frameworks and applications in Python
 - Performed electrical and software debugging
 - Communicated with customers and product designers to determine testing criteria
 - Interfaced between Engineering, Production, and Quality departments to resolve manufacturing issues
 - Created ISO compliant work instructions and documentation
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Research Experience

Sharkduino

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

Williamsburg, VA

May 2015-Dec 2017

- Developed and prototyped a low power accelerometer and gyroscope-based sensor system
 - Designed PCBs with Eagle, and assembled them using a solder reflow oven
 - Conducted deployments of the system on live animals in a semi-controlled environment
 - Performed data validation and analysis in MATLAB and R
 - Lead a team of six students in developing hardware, software, and data analysis
 - Reported results in thesis, presentations, and poster sessions; documented progress in a weekly blog
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Internship Experience

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
 - Performed workflow analysis, data quality assessment, parameter tuning, and algorithm validation
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Technical Skills

Software: Python, Altium, MATLAB, C, Eagle, R, BASH, Git, Mercurial, \LaTeX

Hardware: IPC J-STD-001 Soldering, Oscilloscope, Logic Analyzer, Function Generator, Digital Multimeter

Activities and Organizations

Hiking, Backpacking, Blogging, Magic: The Gathering, AEII fraternity, Eagle Scout