

# William Laney

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## Education

### Cornell University

*M.Eng. Electrical and Computer Engineering*

**Ithaca, NY**

*Aug 2019-May 2020*

- GPA: 3.9
- Designing a novel pattern projector system for stereo image matching

### 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
  - Wrote testing frameworks and applications in Python
  - Developed PCBs with Altium to support testing
  - 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
  - Led a team of six students in developing hardware, software, and data analysis
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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
- Identified and enacted changes to bring digital radiography system into compliance with MIL-STD-883K
- Created database of radiation exposure of microelectronics during X-ray inspection

### 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, Linux, ROS, Git, Mercurial,  $\LaTeX$

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

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## Activities and Organizations

Hiking, Backpacking, Photography, Blogging, AEII fraternity, Eagle Scout