

# Josh Booth

Shippensburg, PA 17257 & McConnellsburg, PA 17233

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## Education:

- McConnellsburg High School; GPA: 4.04 Graduated June 2018
- Shippensburg University, B.S. for Computer Engineering Graduating May 2022

## Work Experience:

- United States Naval Research Laboratory Employee Summer 2018
  - Simulated radio frequency communications passing through noise using MATLAB.
  - Proved machine learning could identify messages corrupted with noise.
  - Primary author on “Machine Learning in Radio Frequency Communications.”
- United States Naval Research Laboratory SEAP Intern Summer 2017
  - Worked on the “Tri-service Synthetic Biology Project” using machine learning to identify promoter sequences after parsing them with python.
  - Collaborated with fellow scientists to delegate tasks and share results.
  - Co-authored “Prediction of Bacterial Promoter Sequences using Machine Learning.”
- Central Fulton School District Help Desk Technician August 2015 - July 2018
  - Managed and assigned help desk tickets.
  - Troubleshoot and repaired teachers’ and students’ school and home computers.
- Phone Repair Technician August 2016 - Present
  - Managed and communicated with clients for repairing their phones.
  - Inventoried spare screens, batteries, and other phone parts to speed up the phone repair process.
- Website Manager for Buchanan Trail Sporters LLC November 2017 - May 2018
  - Consulted with a local business to create a website and manage the content.
- Agriculturalist May 2013 - August 2015
  - Grew various crops, advertised, and negotiated with various businesses to stock the produce.

## Engineering Skills and Notable Projects:

- Programmed serial communications using checksums between a Raspberry Pi and a specialized module for reading outputs of oil wells using C.
- Used machine learning library TFLearn in various applications at the Naval Research Laboratory in Washington D.C. as well as parsed numerous datasets for usage within the neural network using Python.
- Implemented home security using Raspberry Pi cameras to have motion detection and facial recognition using libraries in both Python and C++.
- Constructed website using web2py for managing on-going phone repairs.

## Certifications/Achievements:

- CompTIA A+ Certified Service Technician July 2017
- OSHA Certified March 2018
- Eagle Scout Troop 27 – Mercersburg, PA; February 2018
- Published Scientist
- Ranked 5th Nationally in SkillsUSA Information Technology Competition
  - State and district champion SkillsUSA Information Technology Competition
- 2017 Pennsylvania State Track Meet 300m Hurdles Champion

References available upon request