# Joshua Booth

Shippensburg, PA 17257

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#### **Education:**

B.S. for Computer Engineering Shippensburg University of Pennsylvania, Graduating May 2022

Minor: Mathematics

Accredited by ABET, Inc.

GPA: 3.99

#### **Certifications/Achievements:**

CompTIA A+ Certified

**OSHA** Certified

Eagle Scout

Salutatorian

Active Security Clearance

Placed 5th Nationally in SkillsUSA Competition for the Information Technology field

2017 Pennsylvania State Track Meet 300m Hurdles Champion

### **Work Experience:**

Independent contractor

2016-2020

- Designed and built an FDM 3D printer inside a server rack for printing engineering plastics (PEEK,
  PSU) with marlin firmware and custom software for heating the chamber
- Developed websites for Buchanan Trail Sporters LLC, boothapartments.com, and marqoapp.com using Django with SQLite or Postgres backends
- Replaced/repaired components for varying models of iPhones
- Constructed pipeline to autonomously identify equipment problems based on client/technician email dialogue

United States Naval Research Laboratory Employee

Summers of 2017-2019

- Collaborated on Tri-service Synthetic Biology Project using machine learning to identify promoter sequences and co-published an infographic on the topic.
- Synthesized data and conducted research for my internally-published paper, "Machine Learning in Radio Frequency Communications."
- Used machine learning on satellite imagery for object detection, setup Kubernetes clusters and Pachyderm pipeline for rapid network prototyping

Central Fulton School District Help Desk Technician

2015-2017

Managed and completed computer-related help desk tickets, collaborated with others in the program to quickly resolve complex issues

## **Engineering Skills and Projects:**

Programmed serial communications using checksums between a Raspberry Pi and a specialized module for reading outputs of oil wells using C

Implemented home security using Raspberry Pi cameras to have motion detection and facial recognition using libraries in both Python and C++

Repaired cracked cylinder head in a car

Designed and stick welded together a racing simulator assembly