# Alexander G. Rhoads

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### **OBJECTIVE:**

Actively seeking an Aeronautical Engineering internship for the summer of 2018. Interest in research and development primarily.

# **EDUCATION:**

**The Ohio State University**, Columbus, Ohio. B.S. in Aeronautical Engineering Minor in Nuclear Engineering

Overall GPA (4.00 scale): 3.24

### **TECHNICAL SKILLS:**

Software: Linux, MATLAB, SOLIDWORKS, C++, HTML/CSS

**Machining:** EDM, Laser Cutter, Waterjet, Metal/Wood Lathe, Shield-arc wielding, Assortment of hand tools **Relevant Coursework:** Circuits, Differential Equations, Thermodynamics, Thermal Hydraulic Fundamentals,

Statics, Dynamics, Strength of Materials

Other: 3D printing, Microcontrollers, Aluminum Casting

# **ENGINEERING EXPERIENCE:**

# The Ohio State University

August 17 – Present

Graduation: May 2019

Undergraduate Student Researcher

Currently developing an innovative Radioactive Dispersal Device detector

# **PAS Technologies, Engineering Intern**

(40 hours per week) May 16 -Aug 16

- Communicated with supervisors and suppliers on a daily basis.
- Met with a machine supplier to provide PAS Technology with a more efficient machine.
- Monitored Creep feed grinder and Electric Discharge Machine (EDM) while first run parts were going through.
- Interpreted numerous technical documents so as manufacturing would run smoothly.

# "Discovery Lab", Air Force Research Lab, Research Intern

(40 hours per week) May 15 – Aug 15

- Collaborated with three other engineering interns to design and build two functioning products.
- Independently programmed the bridge inspection robot using: HTML, Python, and Linux.
- Communicated the technical progress/problems to superiors daily.
- Implemented rapid prototyping technology to make the initial designs. Laser cutters and 3D printers where used during this stage.
- Designed circuit board with EagleCAD, programmed with an Arduino Atmega chip.

### **Engineering Project**

April 14 – Present

Delta 3D printer

- Constructed a Delta 3D printer from scratch using parts purchased from McMaster Carr, Amazon, and Printrbot
- Continually printing new and improved parts

# **PROFESSIONAL & COMMUNITY ACHIEVEMENTS:**

- Boy Scouts of America, Eagle Scout, December 2012
- Buckeye Boys State participant, 2014
- Dean's List, 2 terms