# Alexander G. Rhoads

## www.rhoadsa81.github.io

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#### **EDUCATION:**

The Ohio State University. Columbus, Ohio.

B.S. in Aeronautical Engineering—Graduation: May 2018

#### **TECHNICAL SKILLS:**

Linux MATLAB LabVIEW 3D printing (Delta and SOLIDWORDS XYZ)

JavaScript HTML/CSS Wood and Metal Python PHP

**Shop Experience** 

### **Engineering Experience:**

**Student Research Intern** 

May 15 – Aug 15

"Discovery Lab", Air Force Research Lab, Wright-Patterson Air Force Base

Dayton, Ohio

- Designed and built a Remotely Controlled Inspection (RCI) Robot to help with the bridge inspection process
- Programmed the RCI Robot in Linux using a variety of programming languages including HTML, PHP and JavaScript
- An AutoCAD rendition of the RCI robot was constructed using Solidworks and SolidEdge.

Student Research Intern

May 15 – Aug 15

"Discovery Lab", Air Force Research Lab, Wright-Patterson Air Force Base

Dayton, Ohio

- Designed and printed a set of smart glasses (Bl!nkware) that alerts drivers if they become drowsy.
- Bl!nkware was designed in Solidworks and programmed in Arduino using an ATmega chip and a custom made circuit board.

**Engineering Project** 

April 2015

FE Advanced Energy Vehicle (AEV) Competition

Columbus, Ohio

- Built an AEV that competed in time trials with various constraints. AEV must be as efficient as possible.
- Designed and constructed an AEV that implemented a micro servo. With our unique design we were able to clench Runner Up in the competition beating out 200 other teams.

Engineering Project

April 2014

Delta 3D printer

Hillsboro, Ohio

- Constructed from scratch, built a working Delta 3D printer with a printing surface of 11"X11"x8".
- Increased print resolution by increasing resolution of all moving parts.

#### PROFESSIONAL AND COMMUNITY ACHIEVEMENTS AND ACTIVITIES:

- Eagle Scout
- Buckeye Boys State participant
- Runner Up at Ohio States University Wide "Advanced Energy Vehicle" Competition