# JOSHUA GIBSON

Huntsville, AL | (256) 226-6589 | jg0137@uah.edu | linkedin.com/in/poland002/ | josh-gibson.com

## EDUCATION

**University of Alabama in Huntsville**
- *B.Sc. Industrial & Systems Engineering* | *GPA: 3.6/4.0* | Graduation: Spring 2026
- Dean's List x3, President's List x1, UAH Merit Scholar, Boeing Business Scholar
- Alabama Boy's State Scholarship Nominee, Alpha Lambda Delta Honor Society

**University of Alabama in Huntsville**
- *M.Eng. Systems Engineering & Engineering Management* | Graduation: Summer 2026
- JUMP Program Participant, Beacon Fellowship Nominee, UAH Merit Scholar

## TECHNICAL SKILLS

- **Programming & CAD:** Python (OpenCV, NumPy, Pandas), R & R Studio, MATLAB, Fusion 360, Solid Edge
- **Tools:** Keras, TensorFlow, Simulink, Siemen's Teamcenter, G-Suite, Atlassian Tool Suite (Git, Jenkins, Jira)
- **Systems Modeling:** Systems Modeling Language (MagicDraw, Enterprise Architect), Unified Modeling Language
- **Specialties:** Prototype design, Model-based systems engineering, R&D, Project management/PLM, Machine learning

## WORK EXPERIENCE

**Rotorcraft Team – C17 uSource Product Definition (PDT) Program**
January 2024 – April 2024 | 25+ hours per week | ***The Boeing Company*** | Contract
- **Provided product lifecycle management (PLM) support** to Boeing through collaboration with 20 A2R employees from Huntsville and 20 contractors from Houston, while **employed by the University of Alabama in Huntsville.**
- **Achieved highest completion rate** for deliverables for 4 of 6 C-17 assignment packets **using Siemen's Teamcenter**.
- **Collaborated with project management** to track work efficiency of UAH team and completion rates of deliverables.
- **Organized in-depth peer reviews** of UAH teams' deliverables encompassing revisions of draft markups, cage verifications, and effectivity verifications, **resulting in a ~ 40% rate of revision on deliverables.**

**Research & Development Engineer**
July 2023 – December 2023 | 20+ hours per week | ***GoCheck Kids*** | Internship
- **Modernized** photo screener prototypes **through adding touch screen technology** & calibrating flash intervals.
- **Achieved an implementation rate of 60%** through conducting comprehensive analysis and testing **for R&D projects** encompassing optics, software & electronics.
- **Optimized and automated** crescent measurement process by **developing Python scripts** to evaluate images and assign Ametropia values, resulting in a **90% reduction** in the time required to perform calculations.
- **Solved challenges** involving pupil constraint by adjusting wavelengths of projected light with **Python scripts**.

**Design & Integration Engineer**
July 2023 – September 2023 | 20+ hours per week | ***GoCheck Kids*** | Internship
- Designed and **implemented advanced image processing algorithms**, allowing photo screeners to detect subtle visual markers of eye conditions, achieving a **95% accuracy rate** in preliminary tests.
- **Collaborated with a team of 4** by **leading design prototyping & POC projects** for photo screener models.
- Integrated **electrical & software subsystems** of photo screener prototypes to achieve functional models.

## PROJECTS

***Project Erika,*** *Independent Project*
- Spearheaded a **machine learning** research project focusing on the enhancement of breast cancer diagnostics, achieving a predictive **accuracy of ~97%** and a **loss value of 0.0792** in model evaluation.

*Gibson, Joshua. 2024. Mobile Phone Mounting Mechanism for Bicycle Handlebars. US 63/637,230, Patent pending.*
- Bicycle handlebar **phone mounting mechanism** that securely holds and allows interaction with a smartphone in a horizontal orientation, featuring **adjustable, stable, and durable design** elements for safe and convenient access.