

Anthony Tugman

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EDUCATION

Indiana University, Bloomington, IN May 2021
M.S in Intelligent Systems Engineering

Indiana University, Bloomington, IN May 2020
B.S in Intelligent Systems Engineering – Concentration in Cyber-Physical Systems
Minors in Mathematics, Small Business Management – Cumulative GPA: 3.36/4.0

PROJECTS

InLocus REU, Bloomington, IN May 2018-August 2018
Undergraduate Researcher

- Integrated LoRa communication using Python scripts to transfer data from autonomous drones.
- Explored edge computing techniques to reduce power consumption and server load.

Light Monitoring System for Indiana State Parks, Bloomington, IN January 2018-May 2018
Embedded Systems Developer

- Prototyped an embedded system and checked performance using oscilloscopes and multimeters.
- Designed an efficient PCB layout integrating the system microcontroller and sensors using Autodesk EAGLE and adapted a weatherproof device enclosure to dimension using Fusion 360.

Improving Maker Technology For Older Adults, Bloomington, IN August 2017-December 2017
Undergraduate Researcher

- Fabricated 3D printed circuit connectors allowing those with impaired coordination to use the device. Documented my design so that researchers may incorporate it in future research.

Alarm Mat, Bloomington, IN August 2016-December 2016
Project Manager

- Lead a team of three undergrads to create the device using laser cutting, 3D printing, and Arduino.
- Used the design process to bring the device from an idea on paper to fully functional.

TECHNICAL SKILLS

- **Languages:** Python, Verilog, Arduino C, C, C++, Java
- **Platforms:** Linux, MacOS, Windows
- **Other:** 3D Printing, Laser Cutting, Git, Fusion 360, Autodesk EAGLE, Adobe Illustrator

EXPERIENCE

Teach IT Internship, Bloomington, IN January 2018-May 2018
Student Intern

- Developed personalized tutorials for adults in the community to improve their technology skills.

LEADERSHIP

Engineering Club, Bloomington, IN September 2017-May 2018
Outreach Director

- Executed methods for increasing club membership, successfully recruiting 20 members.

Banneker Community Outreach, Bloomington Indiana September 2016-January 2017
Student Mentor

- Mentored underprivileged students, providing resources for them to meet academic goals.