Vision

The basic stuff

What is Vision?

What you'll need to know

- Python
- C++
- Basic command line interface in Linux
- Time management
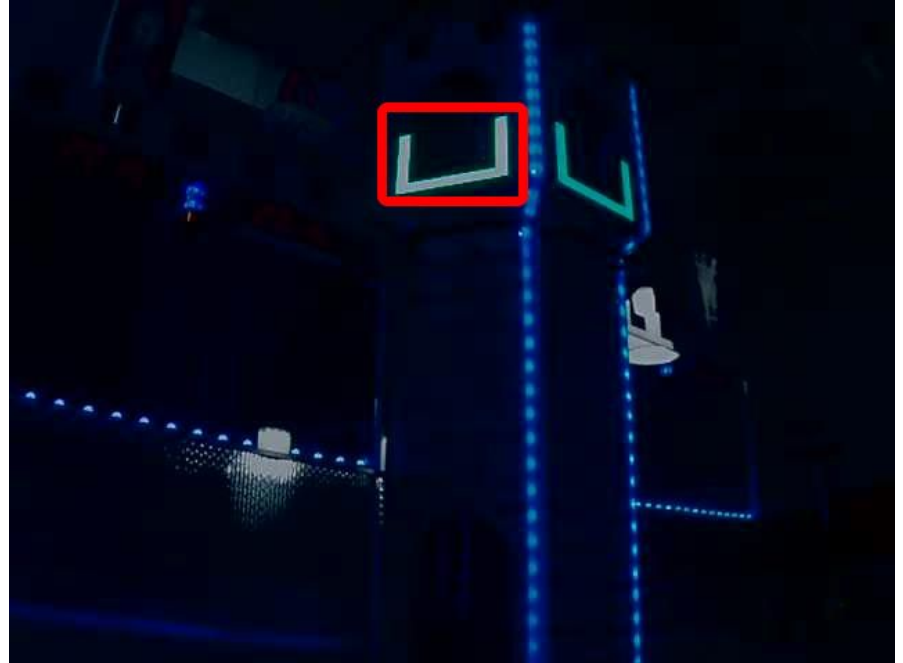- Hardware

How?

How does vision work?

It's actually pretty simple.

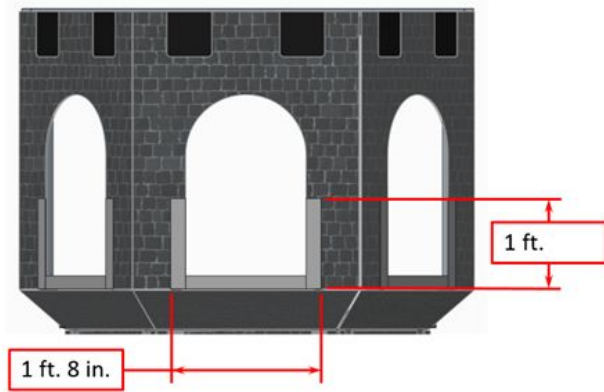**Three** parts you need to be worried about

- Recognition
- Computation
- Reaction

Recognition

- Detecting something that we need focus on
- Performed on the Jetson
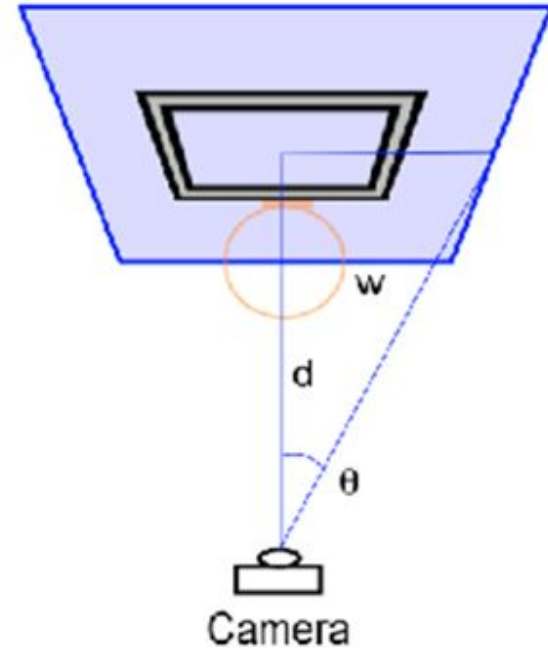- Like a vision target or something

Computation

1 ft.

1 ft. 8 in.

- Retrieving useful information from the image
- The distance from a target
- Can be done on either system

Reaction

- Reacting to the new information in a useful way
- The part where we actually align the robot to shoot at the target
- Done on the robot

This Year.

Our Projects

Night Owl

- Pre-existing
- Adaptable simple vision process
- Does not use complex machine learning
- Uses OpenCV

Project C

- The difficult one
- Untrodden territory for the team
- Use machine learning on the Nvidia Jetson

Time to learn python.