AARON SCALETTY



SKILLS

- Manual Drafting experience and experience in Solidworks
- Experience with microcontrollers such as Raspberry Pi and Arduino

ELECTRICAL & SOFTWARE

C++, MATLAB, Python, Soldering

PROJECTS

Arduino Controlled RGB LED Strip

 Designed a circuit to control a 12V RGB led strip. Using a wifi adapter to design a remote control interface.

Depression Detecting Discord Bot

Using the sklearn, pandas and many more python libraries, I created a discord bot with a group of friends that uses machine learning to detect if someone is at risk for depression based on their response to a questionare. This entire project was completed in 36hrs at a hackathon and I learned a lot very rapidly.

Cardboard Canoe

- Used multiview drafting drawings to design a canoe made with cardboard and duct tape.
- Lead the construction of a notching tube frame with a hole saw.
 Facilitated the seamless covering of the hull in several layers of duct tape for buoyancy.

Self Loading Trebuchet

- Made multi-view drawings of a trebuchet.
- Constructed a gearbox and an arduino control panel to variably control the distance throw with a potentiometer. Coded a program in C++ to for the control panel.
- Constructed a release mechanism and sent the projectile over 40 ft.
 Check it out at https://www.instructables.com/Self -Loading-Trebuchet/

EDUCATION

University of Kansas

Pursuing a BS in Mechanical Engineering. GPA :2.1

STUDENT ACTIVITIES AND INVOLVEMENT

Engineers Without Borders | Volunteer | Lawrence, KS August 2023-Present

- Served as Director of Communications for the club. I coordinated emails for weekly events and made the semester newsletter twice.
- Worked concessions at football games to help fundraiser for EWB international projects in Uganda and Bolivia.
- Completed report writing and project management tasks for a sustainable water borehole project in Uganda.

Scouts BSA | Eagle Scout and Senior Patrol Leader | Shawnee, Kansas August 2018- Present

- Organized and led scout meetings and campouts as Senior Patrol from 2021-22. Received Outstanding Senior Patrol Leader of the Year from my local district for my service.
- Planned and implemented my Eagle Scout Service Project at local public park. I guided a group of 50 scouts in spreading gravel on 3/4 of a mile of trail and placing 8 1/4 mile signs around a lake.
- A total of 150 volunteering hours went into this project.
- This summer I continued my leadership of the troop as an adult leader. I helped Scouts that did not pass the swim test by conducting additional swim tests and working with them on their swimming form.

Sound Tech and Free Hot Soup | Volunteer | Lenexa,KS August 2018 - July 2023

- Volunteered as a sound technician for my local parish. Set up and managed the audio system and the live stream during mass and choir concerts.
- Cooked and delivered suppers for homeless in Kansas City.
 These volunteering activities and others have earned me the Presidential Service Award three years during high school.

Ace Hardware | Cashier | Lenexa, KS May 2023 - Present

- Worked to help customers find solutions to solve plumbing, electrical problems.
- Checked out customers efficiently and cleaned the store at closing.
- Learned how to talk to customers to understand their problem to find the most effective solution.