
Projects

AmoangOus - amoangous.me -  - Discord bot + webapp to mute users

- Built discord bot using **discord.js** to keep track of players and their AmongUs colours in multiple servers, and change their mute status on command
- Built **react.js** webapp to communitate with bot using **socket.io**
- Deployed on Digital Ocean VPS with **nginx**.

EyeGAN -  -  - Used DCGAN to create human eyes

- Collected and augmented images to create a high quality dataset of 1000 eyes
- Used **tensorflow** to create GAN architecture, to create RGB human eyes

Robot XboxController -  - Combined arduino with unity ml-agents to play a game

- Translated 1x1 coordinate grid positions to servo movements to control xbox joystick using an **Arduino**
- Trained reinforcement learning model using Unity ml-agents to balance a ball on a platform

Hackathons- Participated in numerous hackathons

- **Hack The Hammer II**- Built route safety calculator using the **google maps API** and **scikit-learn**
- **Hack The Valley IV**- Built a motion tracking system of animals with an **esp32**, **firebase**, and a JS webapp
- **Massey Hacks 2020**- Built a video summarizer. Pulled captions from API, then ran a summary algorithm to extract important parts, for python script to put together.
- **Silly Hacks 2020**- Built simple AmongUs discord bot that used **http post requests** and **OCR**. Morphed into the more elegant AmoangOus project

Education

Thornlea Secondary School- Secondary School 2018 - 2022

- **Clubs**: co-president of chess club, STEM team(pre-covid), robotics(pre-covid), chemistry club(pre-covid), computer club(pre-covid)
- Participated in all Waterloo contests. Scored 34 on senior CCC

Experience

Spirit of Math Schools- Assistant Teacher Dec. 2018 - Current

- Led an extra help session, taught kids from all grades new math strategies, techniques and skills

The Steam Project- Counsellor July 2020 - August 2020

- Worked with young kids on 3d pens, cricut cutters, and other STEM topics

Skills

Languages: Python, C++, Javascript, Git, Arduino, \LaTeX , HTML, CSS

Libraries: Tensorflow/Keras, Numpy, Pandas, Scikit-learn

Interests

Academic: Computer Hardware, Drones, Robotics

Other: Badminton, Hockey, Piano, Cello, Curling