# **Brandon Eng**

(415)672-5878 | brandoneng000@gmail.com | github.com/brandoneng000 | brandoneng.me

### Education

California Polytechnic State University, San Luis Obispo

December 2016

BS: Computer Engineering

### Skills

Programming Languages – Python, Java, C, C#, C++ Libraries/Frameworks – Django/DRF, Beautiful Soup Environment/Tools – MySQL, GIT, Postman, AWS (EC2, RDS), NGINX, Ubuntu, Docker

## **Projects**

### Minigames – https://worldminigame.com/ – GitHub

February 2022

- Developed and formatted minigames of Rock Paper Scissors and Coin Toss using JavaScript and HTML
- Recorded the results of each player in a joint record for each game
- Developed RESTful API using Django Rest Framework in Python
- Setup a CI/CD workflow utilizing GitHub Actions
- Ran Django unit tests to verify and maintain functionality
- Deployed on AWS EC2 Instance utilizing a RDS MySQL database

#### MHR Monsters – https://mhr-monsters.herokuapp.com/ – GitHub

January 2022

- Displayed details on large monsters in Monster Hunter Rise
- Provided users with a simple view on monster's average weaknesses
- Made use of API to communicate between web interface and MySQL database
- Created easy to use front-end using Django Templates
- Employed Django REST Framework through Python
- Deployed using Heroku and ClearDB

#### Monster Hunter Rise Data – GitHub

January 2022

- Scraped websites to retrieve HTML data from Monster Hunter Rise using Python
- Processed HTML information and outputs data into CSV
- Employed Beautiful Soup to extract HTML

### MHR Builder – <a href="https://www.mhrbuilder.com/">https://www.mhrbuilder.com/</a>

May 2021—August 2021

- Visited and used by 22,000 users over the course of a year
- Collaborative work in designing armor and weapon simulator for Monster Hunter Rise
- Extrapolated figures based on game and user equipment to improve their theoretical output
- Gathered and stored equipment data in JSON
- Encoded data into Base64 for ease of sharing equipment loadouts
- Utilized Vue.js to develop interactions between certain weapon states and bonus effects
- Tested application to verify functionality and accuracy of calculations

#### LZW Decompression

February 2015

- Decompressed data that was compressed using LZW compression. Written in C.
- Developed how program stores and generate data
- Used bit manipulation to convert compressed data into ASCII

## Work Experience