# Gavyn Ezell

## **EDUCATION**

# University of California, San Diego

2020-Present

BS, Computer Science

San Diego, CA

#### Relevant Coursework

Advanced Data Structures, Design and Analysis of Algorithms, Software Engineering, Database System Principles, Computer Graphics, 3D User Interaction

#### **SKILLS**

Languages: Python, JavaScript, C++, C#, SQL

Technologies/Frameworks: Node.js, Express, MySQL, MongoDB, Unity, Docker

#### **WORK EXPERIENCE**

### GoFundMe - Software Engineering Intern

**June 2023 – September 2023** 

Remote

- Worked with a data engineer to build Eventer, a lightweight API for event streaming, using Python, FastAPI, and Apache Kafka
- Collaborated with backend developers to help integrate Eventer within the company's microservice architecture

#### VoLo Foundation - Software Intern

**July 2022 – September 2022** 

Remote

- Collaborated with a small team to create a simple web app for quick access to user data for health wearables, such as Fitbit, Oura, and Dexcom
- Integrated multiple APIs within a Flask app, by managing token authentication and OAuth 2.0 protocols
- Used pandas for data processing and manipulation to build organized CSVs for related health data

#### Jamba Juice - Crew Member

June 2019 – August 2019

Honolulu, HI

- Responsible for setting up store front and kitchen for opening shifts
- Serviced customers at the register as well as preparing their orders

#### **PROJECTS**

#### SSBU Personalized Player Tracker

- Used Express.js and MySQL to create a personalized web dashboard for specific player information for the Super Smash Bros. Ultimate competitive eSports scene.
- App makes use of Start.gg's GraphQL API, for easier monitoring of your favorite competitors and their info, such as recent placements, upcoming tourneys, and socials
- Built a relational schema for handling site users and personalized dashboard data
- Incorporated Twilio's Messaging API for a simple notification system

# Ray Tracer from Scratch

- Built a simple ray tracer from scratch in C++, under OOP design and practices
- Ray tracer can read a formatted scene description file, and render a PNG image containing transformed triangles, spheres, and lighting
- Incorporated the Blinn-Phong reflection model, handling recursive ray tracing for specular reflections
- Implemented a Bounding Volume Hierarchy, for accelerated rendering runtime, cutting down hours of rendering down to seconds
- Additionally created a script for translating .obj files into a readable files for ray tracer

## **Eventify - ACM Projects**

- Worked with a group of six people to build a web app where users could easily browse events on campus, and even promote their own events on campus
- Used Express.js, MongoDB, and Mongoose for managing user and event data. Additionally used an AWS S3 bucket for image storage, and Passport.js for user authentication

# **EXTRACURRICULARS**

# Video Game Development Club

April 2022 - June 2022

General Member

La Jolla, CA

- Learning game development by participating in an official school Game Jam
- Scripting in C# within the Unity Game Engine to create simple 2D game functionality, such as movement, and interactive UI
- Additionally learning FL Studio for creating music, and Audacity to for in-game sounds

Other Likes and Hobbies: Piano, Video Games, Surfing, Exercise, YouTube, Pho and Ramen, NYT Mini Crossword, VR