## Anthony Ray Esmeralda

Baldwin Park, CA 91706 | (626) 758-8643 | Github | LinkedIn | aresmeralda95@gmail.com

## **Education**

## **Bachelor of Science, Computer Science**

University of California, Irvine

September 2018 – June 2020

Major/Overall GPA: 3.7/3.47Dean's List: 2018, 2020

# **Work Experience**

Student Assistant III

Mt. San Antonio College

February 2018 – August 2018

- Demonstrated and explained concepts to students who needed help in Math and Computer Science
- Effectively communicated with other assistants regarding progress of work and other necessary information within the workspace.

#### Skills

**Languages**: C++, C, Java, Python, JavaScript **Technologies:** React.js, Node.js, MongoDB, MySQL

Familiar OS: Linux (Ubuntu), MacOS

## **Projects**

School of ICS Search Engine

Spring 2020

- School of ICS Search Engine is a Search Engine that crawls through the domain \*.ics.uci.edu.\* which contained about 55,684 webpages and 19 million unique tokens.
- An inverted index was created to store each token and to map it to which webpages that they located in. Afterwards, we created a tf-idf (term frequency algorithm) to decide what webpage was best suited for the user's search query.
- This was designed and written using Python since the programming language had a well-known scraping library known as beautifulSoup to parse html files.

FabFlix

Winter 2020

- A full stack application built with Java backend using Jersey and Jackson and React JS frontend where user(s) can make purchases of any movie within our availability with the PayPal payment option via Paypal API.
- This web application was implemented with three different microservices. The IDM (Identity Management), payment processing, and accessing the movie database using jdbc. All this is accessible to the user through an API Gateway.

AntEatz

Winter 2020

- AntEatz is a full stack application built with Java backend using Jersey and Jackson and React JS frontend that provides UCI students a more convenient way to sell and buy meal swipes to other students on campus.
- This web application was implemented with two microservices. The IDM and communication service(s) using Twilio SMS.

Wumpus World AI

Winter 2020

- Wumpus World AI is an AI built in Java that can solve a NxN size Wumpus World game.
- This was implemented by using graph algorithms such as Breadth-First Search and Uniform Cost Search. In addition, First Order Logic and Propositional Logic was also used.

Digital Waste Bins

Spring 2019 – Fall 2020

- Digital Waste Bins are waste bins that display information of which trash bin to use when throwing away your item and providing positive feedback when throwing it away.
- The role that I played within this team was that I handled the multi-threading and how the images should be dynamically inputted within our program.
- The project is currently deployed at UCI's West Food Court and BC Taverns.