# **Thomas** Huang

4th Year Applied Mathematics Student











#### **EDUCATION**

# UNIVERSITY OF CALIFORNIA, LOS ANGELES

September 2019 - Present | Westwood, California MAJOR IN APPLIED MATHEMATICS, SPECIALIZATION IN COMPUTING

School of Letters & Sciences, B.S. Cum. GPA: 3.799 / 4.0

# **WORK EXPERIENCE**

**DUNMOR** | Data Engineer Intern June 2022 - September 2022 | Woodland Hills, CA

- → Cleaning/engineering raw data using **SQL** on over **200 million** records with Amazon's Redshift to fulfill tasks
- → Engineered and developed filtering of top competitor's loaning metrics to be shown
- → Designed clustering logic of borrowers utilizing forward filling based on name and/or address

## **PROJECTS**



- → Implementation of an interactive maze solver to trace a solution path, utilizing **PyGame** and relying on their **Sprites** for efficient cell visualizations.
- → Allows user to indicate a start and end position for the maze, as well as placing obstacles/walls if desired.
- → Allows user to choose between **BFS/DFS** for the path visualization.

# RECIPE APP PYTHON



- → Recipe App is an interactive application geared towards helping the home cook find recipes catering to their pantry or cravings.
- → Scraped the database of ~1,000 recipes from www.SeriousEats.com with Scrapy, where the user's queries are fulfilled with SQLite3
- → Designed and created user and display interface with PyQt5

# MINI ROGUE C++





- → Mini Rogue is a multi-level dungeon adventure game playable on the command prompt or terminal.
- → Utilized object-oriented design, inheritance, and polymorphism to develop player and monsters
- → Developed dungeon level generator, combat, items, and abilities the user can utilize to eventually acquire the golden idol to win the game.

## SKILLS

#### **PROGRAMMING**

Proficient:

Python • SQL (Postgres)

Familiar:

C++ • Java • HTML/CSS

#### COURSEWORK

Formal Languages and Automata Theory Algorithms and Complexity Data Structures Mathematical Modelling Discrete Math Linear Algebra

#### LANGUAGES

#### **ENGLISH**

**FLUENT** 

**SPANISH** 

INTERMEDIATE

#### HOBBIES

Music • Food • Fashion • Video Games • Reading