

Francis Wan

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github.com/oFwano | oFwano.github.io

TECHNICAL SKILLS

- Programming: Python, C++/C, JavaScript, Java, HTML/CSS, R, SQL
- Language: English (fluent), Mandarin (intermediate), Cantonese(intermediate)

PROJECT EXPERIENCE

ShareChat

Full Stack Web Chat Application

October 2020

- Utilized Firebase's Cloud Firestore to implement a database to store chat messages and implement security logic to ensure chat user is authenticated before using the application.
- Implemented front end interface using React and CSS.
- Implemented Google user authentication using Firebase authentication API.

Tic-Tac-Toe Web App

Multiplayer Web Application

September 2020

- Programmed game logic, AI mini-max algorithm using JavaScript and p5.js for front-end.
- Used Node.js and Socket.IO to create a back-end server for real time multiplayer gameplay.

Movie Recommendation System

Item Based Collaborative Fitting System

June 2020 – August 2020

- Collaborated as a team of three to create a movie recommendation system focusing on the MovieLens dataset, resulting in a project score of 100%.
- Designed and implemented an item-based collaborative filtering system to recommend similar movies using the scikit-learn library in Python.
- ETL on datasets with Pandas and NumPy, and statistical analysis using statsmodels.
- Visualized data for statistical analysis using Matplotlib.

Police Story

Software Development Team Project

January 2020 – April 2020

- Collaborated with three other students using an Agile software development approach to develop a 2D arcade game in Java and libGDX.
- Programmed the Enemy Class to chase the player using a Bellman-Ford Algorithm.
- Used Apache Maven for project management and wrote documentation using JavaDocs.
- Performed QA testing by writing unit and integration tests with JUnit.

Fruit Tetris

Computer Graphics Game Clones

October 2019

- Created a 2D game Tetris and Falling Fruits mashup using OpenGL C++.
- Created a 3D version of Fruit Tetris by implementing new mechanics for new gameplay.

PROFESSIONAL EXPERIENCE

Simon Fraser University Esports Association

Burnaby, B.C.

Executive Director for SFUEA's "Hearthstone" Department

September 2017 – August 2020

- Organized and hosted Hearthstone events and tournaments at SFU.
- Recruited and coached players to compete in collegiate Hearthstone teams at SFU.
- Placed second and third place competing in respective North American collegiate Hearthstone seasons.

EDUCATION

Simon Fraser University

Burnaby, B.C.

Bachelor of Science - Computer Science

September 2017 – Present

Expected Graduation Fall 2021