RUBIN TRAILOR

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Education

University of San Francisco, San Francisco, CA *Aug. 2013 – May 2017*

- B.Sc. Computer Science candidate with a minor in Mathematics
- Overall GPA: 3.80
- Dean's List: 2013, 2014, 2015, 2016

Skills

Proficient Languages: Java, Python
Familiar Languages: C, C++, JavaScript, MySQL, HTML, CSS
Frameworks/Libraries: D3.js, JSON, JOGL, OGRE

Projects

Search Engine

- Used an inverted index and TF-IDF scoring to store and rank searches.
- Had user account support using a database with MySQL to save user information such as search history.
- Used a multi-threaded web crawler to analyze web pages or the search query.
- Unit testing using the JUnit framework.

Tanks!

- A 3D action game where the player controlled a tank and destroyed other tanks while trying to avoid being destroyed themselves.
- Featured collision detection, projectile management, item pickups, and AI controller for the bot tanks.
- Created using C++ and the OGRE graphics engine.

Jumper

- A 2D platformer game that featured multiple levels.
- Parsed JSON files generated with free third-party software Tiled to create the levels of the game.
- Utilized different states of the game for different functions such as a pause menu and a retry menu.

Visualizations on Tree Maintenance Calls in San Francisco

- Visualized San Francisco 311 Tree Maintenance Calls public dataset using JavaScript and d3.js.
- Parsed GeoJSON data to create a choropleth map of San Francisco and placed color-coded symbols on the map for each maintenance call.
- Interactive Features: Tooltips when hovering over symbols or neighborhood areas, and radio buttons to filter the display of symbol groups.

Work Experience

Teaching Assistant – University of San Francisco, San Francisco, CA *Aug. 2015 – Present*

- Grading, tutoring, and assisting the professor during class periods.

Research Assistant – University of San Francisco, San Francisco, CA *Dec. 2015 – Feb. 2016*

- Research on focus and context visualization.
- Used Android SDK for tablet application and C++ for desktop version.