

FRANDY JAY-R USI

SOFTWARE ENGINEER

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TECHNICAL SKILLS

Languages: C/C++ , JavaScript, HTML5, CSS3, Node.js, SFML, MelonJS, Bootstrap

Tools: GitHub, Photoshop

EDUCATION

Oregon State University - Corvallis, OR

2017 - 2018

B.S. in Computer Science

GPA: 3.86

University of California, Santa Barbara - Santa Barbara, CA

2012 - 2016

B.S. in Biological Science

GPA: 3.50

PROJECTS

Elemental Tower Defense (Team) | bit.ly/ElementalTDFJ | bit.ly/ElementalTDGitHub

- Led a team of 3 developers to create a browser based game with specialized elemental towers, providing dynamic game strategies and play.
- Designed the overall game's system flow and algorithms, overseeing and resolving over 1,000 lines of members' codes, effectively removing 100% of bugs found.
- Refactored 50% of overall project code with optimal and concise algorithms, reducing the codebase by 25%.

Tech Stack: JavaScript, HTML5, Node.JS, MelonJS

Space Shooter (Solo) | bit.ly/SpaceShooterFJ | bit.ly/SpaceShooterGitHub

- Space Invader game utilizing a retro gaming style, providing a dynamic and engaging experience for the player with varying difficulty throughout the levels.
- Created smoothly interacting, polymorphic objects, ensuring level progression, power boosts, and diverse enemy units ran flawlessly with minimal code.
- Developed a tree-based iteration algorithm, optimizing game run-time by 100%.

Tech Stack: C++, SFML

Snake Clone (Solo) | bit.ly/SnakeCloneFU | bit.ly/SnakeCloneGitHub

- A clone of the classic Snake game implementing vivid sprites and animated sound effects, improving upon the original's visual and engagement capabilities.
- Designed a queue-based snake player that traversed a 2D terrain in constant time iterations, dramatically improving program run-time by removing all in-game lag.
- Organized efficient, clean, and encapsulated code, implementing core object oriented programming principles, allowing new features to be added with ease.

Tech Stack: C++, SFML

PROFESSIONAL EXPERIENCE

Oregon State Computer Science Department, Teaching Assistant

2017 - 2018

- Guided 1,200+ students' growth throughout the semester by providing prompt, engaging instruction, achieving student's practical grade goals with a 97% success rate.
- Conducted weekly office hours, developing personalized lessons for struggling students, debugging and effectively communicating the flaws in over 100 coding errors, and flexibly assisting in labs, projects, and other related programming questions.
- Assessed over 40 assignments weekly, providing detailed responses to students' grade inquiries and raising students satisfaction with professor and staff support by 30% based on end of semester survey.