Seth Laske

sethlaske9999@gmail.com | sethlaske.github.io | linkedin.com/in/seth-laske

Education

California Polytechnic State University - Pomona	August 2020 - December 2023

Bachelor of Science, Computer Science – GPA: 3.90

Experience

Digital Product Developer Intern   May 2023 – August 2023
[American Greetings – Advent Unity Team](#)
- Implementing JL 2023 Advent Calendar in Unity
- Engineered a dynamic in-game level designer, to reduce time per stage from 2 hours to 10 minutes
- Customized the basic A* formula by researching special heuristics, creating an automatic testing setup, and finding exit conditions to reach an optimized performance of <1.50 second average
- Individually designed a puzzle minigame for Advent 2024 as an intern project – includes full gameplay loop, UI, sound effects, difficulty and accessibility options to users
- Worked with QA team to troubleshoot and debug issues on current and previous releases
- Designed new game levels, while updating documentation and organizing playtests for balancing
- Developed modular tutorials and intuitive UIs by comunicating with the creative team under an Agile framework to enhance user experience on mobile and desktop devices

Student Assistant – Simulations Engineer   September 2023 – December 2023
CPP Foundation – InSiDE
- Collaborating with the Aerospace Engineering department to create Unity simulations of Dynamic Physics concepts to be used for educational purposes by STEM professors in the CSU system
- Iterated on UI design elements using faculty and student feedback to facilitate learning
- Designed a modular precision ecosystem to develop real time diverse pulley simulations

Projects

[*NavMesh Pathfinder*](#) – Processing (Java), Solo Dev   September 2022 – December 2022
- Simulated organic steering behavior for rotational and linear movements, utilizing fuzzy logic and vector math to predict and avoid collisions with any preplaced or generated walls
- Designed an automatic NavMesh generator to triangulate any map for the agent to traverse
- Implemented a pathfinding A* algorithm, allowing users to set waypoints for any path in a map
- Used Prims Algorithm to automatically create traversable procedurally generated mazes

[*Branch Battles*](#) – Unity, Solo Dev   January 2023 – September 2023
- Designed FSM based AI to handle all trainable units with unique behaviors and attacks
- Simulated real life army formations through organic group movements and flocking mechanics
- Created modular enemy army controller systems to function within 4 different game modes
- Released game to Itch, after leading playtesting sessions, and finishing all gameplay features

Jack Black Attack – Unity, Lead-10 Person Team   September 2023 – December 2023
- Designed a game pitch presentation to present to the GDC club, which recruited 10 developers
- Managing the team using Trello for task creation and Milanote for mood boards and flow charts
- Developing object-oriented game architecture and documentation
- Designed procedural generation systems to create random levels based on Blackjack gameplay

Skills

Coding Languages – C#, C++, Java, Python, Kotlin
Software – Unity, Visual Studio, Git, Github, JIRA