Seth Laske

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

Education

California Polytechnic State University - Pomona Bachelor of Science, Computer Science - GPA: 3.90 August 2020 - December 2023

Experience

Digital Product Developer Intern

May 2023 - August 2023

American Greetings – Advent Unity Team

- Engineered a dynamic in-game level designer, reducing time per stage from 2 hours to 10 minutes
- Customized A* by optimizing the heuristic calculations and finding early solutions to handle a puzzle with 36! Combinations in an average of 1.5 seconds
- Individually designed a puzzle minigame for Advent 2024 as an intern project includes full gameplay loop, sound effects, difficulty and accessibility options to users
- Implemented a code-based animation routine, creating an immediate feedback loop for users
- Designed new game levels, while updating documentation and organizing playtests for balancing
- Developed modular tutorials and intuitive UIs with the creative team to enhance user experience

Etsy Seller

September 2021 - Present

- Running a small business selling 3D prints and 3D models, averaging 12 orders a month
- Design models on Fusion 360, build and maintain 3D printers for consistent quality, and maximizing slicer settings for speed and material efficiency

Projects

NavMesh Pathfinder - Processing (Java), Solo Dev

September 2022 – December 2022

- Simulated organic steering behavior for rotational and linear movements, utilizing fuzzy logic to predict and avoid collisions with any walls
- Designed an automatic NavMesh generator to triangulate any map for the agent to traverse
- Implemented optimized pathfinding A*, 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 NPC behaviors to handle 8 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
- Reduced development time by automating references between save data, the UI, and the player

Jack Black Attack - Unity, 10 Person Team

September 2023 - Present

- Designed a game pitch presentation to present to the GDC club, recruiting 10 developers
- Managing the team using Trello for task creation and Milanote for mood boards and flow charts
- Developing backend inheritance and controller systems to help teach inexperienced members Unity
- Designed level generation systems to create random dungeons based on Blackjack gameplay

Skills

Coding Languages – C#, C++, Java, Python Software – Unity, Git, Github, JIRA CAD Software – Fusion 360, Solidworks

Coursework – Linear Algebra, Object Oriented Programming, Data Structures, Design and Analysis of Algorithms, Artificial Intelligence, Computer Architecture, Operating Systems, Data Analytics and Cloud Computing, Mobile Application Development, Game Development, Software Engineering