

Daniel He

Field of Interest: Gameplay programmer

Group Projects:

Pogo Rogue

Aug 2023- May 2024

- An action roguelike where you move around and shoot the enemies with a pogostick. Made by Game Maker Studio with a group of around 20 people when I was in U of U.
- Worked as an enemy programmer and designer, designed the concept of all the basic enemies and the final boss, created the parent class and universal functions of basic enemies, wrote the code for explosion, energy shield, homing projectile, and many other utility functions.
- During development, the game had quite a bit of balancing issues. It turns out when the player is on a pogo stick and can't stop bouncing around, even simple enemies that only move around like Goomba can be dangerous. It teaches me the importance of playtesting and communication.
- https://store.steampowered.com/app/2870280/Pogo_Rogue/

Tilt Dungeon

Aug 2024-Dec 2024

- A tablet puzzle game with tilt control, where the player moves around the top down 2D world to interact with puzzle elements. Made by Unity with a 5 people group
- As the only programmer in the team, I implemented the tilt control, doors and switches, boost pad, portal, arrow trap, breakable wall and enemies, as well as all the level transitions and UI.
- This is a great confidence boost for me, the game is simple, but this is the first time I need to code and debug everything in a game on my own.
- <https://github.com/student-danielhe/Tilt-Dungeon>

HardDriverZ

Jan 2025-May 2025

- An Arcade racing game like Mario Karts, made in Unreal Engine 5 with a group of 50 people, my biggest project yet.
- I made the parent class for pickups and status effects, as well as a speed boost pickup as a template. Many other pick ups were then made, but didn't follow the framework I set up and ended up causing a lot of bugs, so in the end I needed to rewrite and fix almost all of them.
- As the biggest group project I made so far, I experience the most communication problems. I made a framework for all pickups and explained them in a document. But many people didn't understand it. This teaches me communication needs to be two sided, I need to make sure others understand my documents.
- <https://store.steampowered.com/app/3533890/HardDriverZ/>

Ling and Corrupted Hollow

May 2025-Dec 2025

- A 3rd person puzzle platformer made in Unreal Engine 5 with a group of 25 people.
- I worked on the savefile as well as almost everything that interacts with save data, such as barriers that open when the player progresses to a certain stage. I also worked on Steam Achievements and helped with UI elements.
- Out of all the projects I have worked on, I believe I learn the most from this one. For me the game itself is not very interesting, the game is mostly about aesthetics not gameplay, the levels are mostly 2 dimensional and linear, and the puzzles are mostly just moving platforms. But save systems, UI elements, and Steam achievements are something almost all games have but not being explored in classes, and I am happy to have a chance to explore them before graduating.
- Steam link not available yet