Daniel He

Gameplay Programmer

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SUMMARY

Gameplay programmer graduating with a Master of Interactive Technology with a specialization in gameplay at SMU Guildhall. Skilled in **Unreal Engine 5**, **Unity**, **Game Maker** and **C++**, with strong experience in procedural generation, enemy AI, and gameplay systems. Contributed to multiple shipped and team-based projects including a roguelike platformer and arcade racer. Particularly interested in indie teams focused on systemic gameplay and experimental design.

EDUCATION

SMU Guildhall — Dallas, TX
Master of Interactive Technology, Specialization in Gameplay Programming — Expected May 2026
University of Utah — SLC, UT
Bachelor of Computer Science — May 2024

SHIPPED TITLES

Ling and Corrupted Hollow (3D Puzzle Platformer) — SMU Guildhall GameLab
Save System and UI Programmer — May 2025-Dec 2025

- Implemented a modular save/load system in UE5 (C++&Blueprint) supporting checkpoints, shops, and progression tracking.
- Developed UI systems integrated with gameplay state, improving player feedback and usability.
- Collaborated with designers and UI team on progression flow and Steam achievements integration.
- Authored technical documents to support cross-team implementation.

HardDriverZ (Arcade Racer) — SMU Guildhall GameLab
Gameplay Programmer (Pickups System) — Jan 2025-May 2025

- Designed and implemented a pickup system framework in UE5 Blueprint, supporting multiple item types and effects.
- Built status effect system enabling reusable gameplay modifiers across pickups.
- Developed gameplay logic for all pickups except Tractor Beam, improving gameplay variety.
- Partnered with level designers to refine environmental hazards and obstacle interactions.
- Conducted systematic bug testing and iteration cycles to improve stability.

Pogo Rogue (Roguelike Action Platformer) — Bounce Back Games
Enemy Designer and Programmer — Aug 2023- May 2024

- Architected base enemy class system in Game Maker, enabling scalable enemy behavior design.
- Design and implemented core enemy types and boss attack patterns.
- Co-developed overall enemy design framework and combat experience.
- Best Student Game Finalist and Best Hobby Game Finalist 2024 Summer Season.
- Steam release. 200+ players reviews (very positive).

PROJECTS

Rogue Exile
Procedural Dungeon Generator (Old school Rougelike) — SMU Guildhall C++ Engine

- Developed procedural dungeon generator in C++ using binary space partition, cellular automata, and Perlin routes.
- Built systems for balanced object distribution and natural/structural level layouts.
- Designed a customizable stat progression system and procedurally generated equipment like Diablo
- Enabled configurable level length and visual style.

Clash of Will — SMU Guildhall C++ Engine

Semi Realtime Roguelike Deck Builder

- Designed and implemented a semi real time combat system inspired by Chrono Trigger
- Built flexible card system architecture supporting diverse gameplay effects.
- Developed status effect framework for triggered and passive mechanics.
- Focused on system extensibility for roguelike deck-building gameplay.

SKILLS

Languages: C ++, C#, Java and Python
Engines & Tools: UE5, Unity, Game Maker, RPG Maker
Core Areas: Gameplay Systems, Procedural Generation, Character AI, Emergent Gameplay, Roguelike design.
Professional: English(Fluent). Chinese(Native). Japanese(Reading and Speaking).