SALEM RICHIE *GAMEPLAY PROGRAMMER*

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SKILLS

Development	Languages	Tools	Design
● Algorithm Analysis/Design	● Advanced C/C++	● Microsoft Visual Studio	● Levels
● Data Structures	● C#	● Unity Engine	● Narrative
● Game Engine Architecture	● Python	● Git Source Control	● Systems

ACADEMIC PROJECTS

AI Programmer | Technical Director   Aug 2023 - Present
Cats & Critters: A Dungeon Claw-er — Multiplayer Party Adventure Game (Unity Engine)
- Compile weekly project builds and conduct technical production meetings to maintain project momentum
- Authored a utility-based AI system by implementing response curves to support flexible multiplayer scenarios
- Implemented AI navigation throughout procedurally-generated levels using dynamic navigation meshes

Systems Programmer | Technical Lead   Oct 2022 - Apr 2023
Inline: Out of Time — Time-Attack Action Platformer Game (Custom Engine)
- Cooperated with other leaders to foster collaboration and synergy in an interdisciplinary team of twelve students
- Created and standardized the level content pipeline to enable our design and art teams to iterate efficiently
- Developed a physics system alongside designer goals for player movement to best allow parkour-style action

Physics Programmer | Level Designer   Jan 2022 - Apr 2022
Nowhere to Grow — Physics-Based Puzzle Platformer Game (Custom Engine)
- Implemented an object management system using custom data structures to manage memory resources
- Simulated physical properties such as mass and restitution to calculate impulse forces and resolve collision
- Designed game mechanics and puzzles to showcase physics simulation through player interaction

ACADEMIC ACHIEVEMENTS AND AWARDS

DigiPen Institutional Full-Tuition Grant	Jul 2021
8 Bits to Infinity Text-Only Game Jam Community Choice Award *(of 28 Entries)*	Dec 2019
SoHacks 5 Hackathon "Best Intermediate Hack" Award *(of 85 Entries)*	Aug 2018

EDUCATION

Bachelor of Science in Computer Science and Game Design   Expected: Apr 2025
DigiPen Institute of Technology — Redmond, WA
- GPA: 4.0

Associate of Arts in Liberal Arts   May 2020
Northeast Lakeview College — Universal City, TX
- GPA: 4.0

PROFESSIONAL EXPERIENCE

Resident Assistant   Apr 2023 - Present
DigiPen Housing, L.L.C.
- Plan and execute community engagement programs that provide opportunities to enhance academics
- Support residents through challenges such as culture shock, homesickness, depression, and burnout
- Encourage diversity, inclusion, and accessibility in our community by educating residents on inclusive practices

Teaching Assistant   Sep 2022 - Jul 2023
DigiPen Institute of Technology
- Provided technical assistance to students and teams in areas such as C/C++ and game engine architecture
- Reinforced student learning objectives by addressing specific challenges and complex topics outside of class
- Encouraged team-oriented habits in student teams by demonstrating communication and production techniques