KALBY JANG

M: (949) 338-8714 | www.linkedin.com/in/kalbyjang | k.jang@digipen.edu | www.kalbyjang.com

EDUCATION

DigiPen Institute of Technology   Redmond, WA
B.S. Computer Science in RTIS (Real-Time Interactive Simulation)   Sept 2017 – Dec 2021

Technology-focused video game studies and development reflecting industry standards and practices.

TECHNICAL SKILLS

Proficient Languages: C, C++, C#, Java, Lua, GNU, CMake

Tools: Unreal Engine 4 & 5, Unity Engine, Nintendo Switch SDK, CLion/Rider (JetBrains), Visual Studio, Maya, Substance Painter, Final Cut, Adobe Premiere, Motion, Git, Linux, Dr. Memory/Valgrind

ACADEMIC PROJECTS

Escape Sequence   Jan 2021 - April 2021
Gameplay Programmer / Effects & UI Designer   Team of 6
Random Level Generated FPS   *(C#, Unity)*

- Deep collaboration with team on gameplay design decisions.
- Responsible for refining gameplay elements and special effects.
    - Low-res pixelation with render textures.
    - Camera head tilting towards damage sources when hurting player.
    - Damage indicator arrows (2D & 3D) using enemy attack data.
    - In-world Terminal displaying level progress and meltdown time.

Hackfight   Sept 2019 – April 2020
Lead Director / Gameplay Programmer / Designer   Team of 5
2D Puzzle Platformer   *(C++, VS 2019, Lua)*

- Gameplay and engine programmer: Component-System engine, Lua gameplay programming, prototyping, physics, rendering, scene and gameobject management.
- Assisted teammates with custom-built engine architecture, physics system, and particle system.
- Worked with designers to discussed and work out features and changes to gameplay.
- Designed prototype to recruit teammates using Unity.

Parkour Character Controller   May 2021 — July 2021
Gameplay Programmer
3rd-Person, 3D Platformer   *(Unity, C#, Mixamo, Visual Scripting/State Machine)*

- Designed and programmed a third-person, parkour character controller with a fixed-angled camera.
- Learned to develop the character locomotion and movement state machine with 9 unique abilities.
    - Walk, run, sprint, jump, dive, airdrop, & wall traversal (climbing, running, jumping).

Wallriders   Sep 2021 - Dec 2021
Gameplay Programmer   Team of 6
Quake-like, Gravity-Defying, Online FPS   *(C#, Unity, Mixamo, Soundly, Netcode for Gameobjects)*

- Worked on core gameplay mechanics with network implementation
- Weapon System: Highly modular and customizable for quick creation. Special Effects.
- Item System: Item spawners and collectables with custom behaviors. Server owned and managed.
- Health System: Health and damage-reducing armor pools, and damage-modifying hitboxes.