PHUONG (AIRI) PHAM

Los Angeles, California | 213-551-4312 | phamairi@gmail.com | https://www.linkedin.com/in/phuong-pham-airi/ | https://www.phuongp.com/

TECHNICAL SKILLS

Python, C, C#, C++, Unity, Unreal, Maya, Nuke, Photoshop, OpenGL, DX11, GLSL, HLSL, GitHub, Perforce

EDUCATION

University of Southern California — Los Angeles, CA
Bachelor and Master of Computer Science — August 2020-Present

- BS GPA: 3.8. / MS GPA: 4.0

INTERNSHIP EXPERIENCE

Respawn Entertainment - Electronic Arts — Los Angeles, CA
Technical Artist Intern | Demo — May 2024-August 2024

- Engineered an Assets Library in Unreal for artists to obtain and inspect assets across multiple titles in the Star Wars franchise
- Leveraged Unreal Blueprints and C++ to add key features such as shop cart user interface, examine mode for meshes and maps, teleportation to objects, and props collection list
- Collaborated with Respawn Technical Art Director to design UI/UX, data flow schemes, and write Unreal utility tools that ensure a smooth user experience and seamless connection with EA Shared Assets Library

PROFESSIONAL DEVELOPMENT

The Veiled Ones — Los Angeles, CA
Technical Artist | Demo — September 2023-August 2024

- Utilized Unity HDRP shader, VFX, and post-processing tools to develop special particle and full-screen visual effects in gameplay and cinematics that enhance the game's horror aesthetics
- Designed environmental and interior lighting work along with a flashlight mechanic that adjusts brightness according to screen luminance with GPU compute shader
- Led efforts with interdisciplinary teammates to document, debug, and optimize performance in Unity HDRP pipeline, reducing the draw steps by 50%

Lanesplitterz — Los Angeles, CA
VFX Technical Artist | Demo — May 2024-Present

- Implement a comic toon post-processing effect with outlines based on depth, normal, and color using Unity URP shader graphs and HLSL
- Cooperate with the Art Director to design and create stylized VFX for impact, launch, and smoke effects with Unity Particle Systems and VFX/Shader graphs

PERSONAL PROJECTS

Particle System | Demo — October 2024-Present

- Design a CPU-based particle system incorporating dynamic attributes like age, color, size, and rotation, along with normal mapping and flipbook animation

Interactive Real-time Grass | Demo — September 2024-Present

- Program a responsive and procedural real-time grass system with physics simulation and culling using Unity URP in HLSL shaders such as vertex, fragment, and compute shader

Renderer From Scratch | Demo — December 2023-January 2024

- Developed a C++ rendering pipeline capable of parsing .obj files, display 3D objects using the Gouraud shading technique (including diffuse, specular, and ambient lighting), with support for normal, glow, shadow mapping, and gamma correction

ACADEMIC PROJECTS

Inverse Kinematics with Skinning | Demo — Los Angeles, CA
CSCI 520: Computer Animation — April 2024-April 2024

- Implemented the algorithm for skinning, forward kinematics, and inverse kinematics to deform 3D characters in C++ & OpenGL

DX11 3D Game Engine | Demo — Los Angeles, CA
ITP 485: Programming Game Engines — March 2024-March 2024

- Built a 3D game engine in C++ & DX11 API with fundamental subsystems like rendering, animation, physics, and post-processing