## **Unity Foveated Rendering and Bloom Effect Project**

This Unity project showcases advanced rendering techniques, including Foveated Rendering and Bloom Effect, implemented using C# scripts and shaders.

## **Features**

Foveated Rendering-

Upon startup, the program begins in the Foveated Rendering Demo scene.

Default setting: Fixed Foveated Rendering (FFR) is turned off.

Key '2' toggles FFR off.

Key '3' activates low FFR.

Key '4' activates medium FFR.

Key '5' activates high FFR, adjusting screen areas to lower resolution according to the FFR level.

Bloom Effect Scene-

Press '1' to switch to the Bloom Effect scene.

Adjust the following parameters via sliders:

Intensity

**Iterations** 

Threshold

Soft Threshold

**Debug Mode** 

**Tint Color** 

Foveated Rendering Scene -

Press '1' again to return to the Foveated Rendering Demo scene.

Use the assigned keys to switch between scenes and adjust settings.

Use keys '2', '3', '4', '5' to toggle between FFR settings.

Implemented using Unity engine, C# scripts, and shaders.

Utilizes custom shaders for Foveated Rendering and Bloom Effects.

\*Foveated Rendering and Bloom Effects are advanced rendering techniques, enhancing visual fidelity and performance.

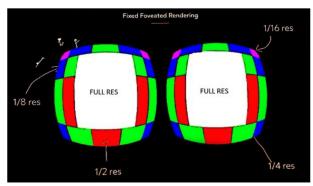


Figure 3: Fixed Foveated Rendering does not utilize eye-tracking, assuming a fixed focal point.

