How to optimize real-time AO

[1]

Brian Will, *OpenGL - SSAO (screen space ambient occlusion)*, (Aug. 18, 2019). Accessed: May 08, 2025. [Online Video]. Available: <https://www.youtube.com/watch?v=7hxrPKoELpo>

This youtube video by Brian Will explains a couple of things, he explains what ambient occlusion is, what screen space ambient occlusion (SSAO) is and how to implement it into OpenGl. This will be instrumental to implementing it in Vulkan.

[2]

Low Level Game Dev, *Advanced OpenGL Topics, BETTER SSAO: HBAO*, (Jan. 07, 2023). Accessed: May 12, 2025. [Online Video]. Available: <https://www.youtube.com/watch?v=fwaGQrQuvpk>

Simular to the previous source, this video by Low Level Game Dev talks about what Horizon based ambient occlusion (HBAO) is and the math behind it.

[3]

[Online]. Available: <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=64477ce7ae737f6d44160c23f5afcd6870424c0d>

This chapter of “CPU Gems 2” talks about a type of ambient occlusion that does not really have a set name but for the sake of convenience, we’ll call it Surface Element Abmient Occlusion(SEAO)

[4]

L. Bavoil and M. Sainz, ‘Screen Space Ambient Occlusion’, 2008.

Articla by NVIDIA about SSAO

This article by NVIDIA talks about SSAO in detail and also tells us some things about HBAO

[5]

‘(PDF) Image-space horizon-based ambient occlusion’, in *ResearchGate*, doi: [10.1145/1401032.1401061](https://doi.org/10.1145/1401032.1401061).