Massive 3D models can often not be rendered in standard 3D viewers due to their size and complexity. Some high end rendering engines propose solutions to this problem, but they require a steep learning curve and high processing power and hardware devices.

A child-parent relation between vertices of successive HLODs meshlets that:

(1) is compatible with parallel preprocessing.

(2) allows for a viewpoint dependent vertex interpolation that ensures a no crack and no popping property.

Our construction implementation (starting from standard mesh file formats) achieves competitive levels of the order of 1 million input triangles per second per core.

Rendering result at 170 fps on a desktop without discrete GPU

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