

# A Deviation-based Vertex Reordering Technique for Mesh quality Improvement

**26<sup>th</sup> International Meshing Roundtable**

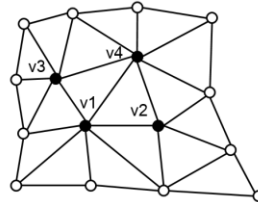
**Poster Session**

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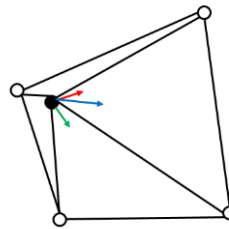
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- **Motivation:** Which vertices should be optimized first for mesh quality improvement?



- **Algorithm:** Reorder vertices based on how likely they are to improve the quality of adjacent elements. The estimation of how effective a vertex movement is based on the gradient of the element quality with respect to the vertex location



- **Results:** Our algorithms both improved the worst element quality and reduced the mesh optimization time

