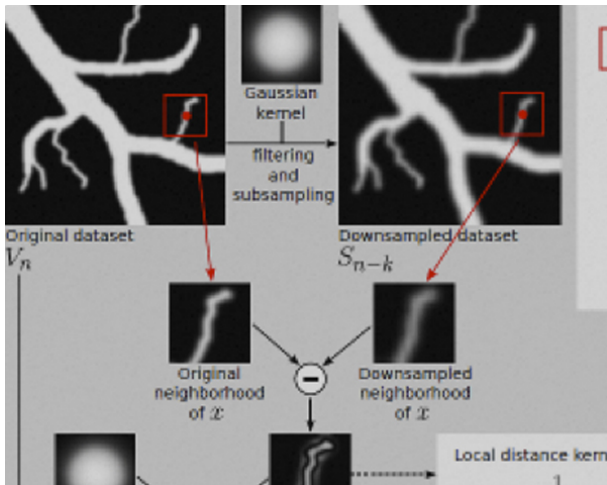


# Feature-Preserving Downsampling for Medical Images

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In the medical imaging field, interactive direct volume rendering of large volume datasets is a challenging task. Multi-resolution techniques deal with this problem by downsampling the original dataset to produce coarser representations. We present an evaluation of different downsampling filters with respect to their effectiveness at pre-serving details of the original dataset. Moreover, we propose a new Gaussian-based filter that produces quality lower-resolution representations and preserves small features that are prone to disappear.