Conditional Sampling

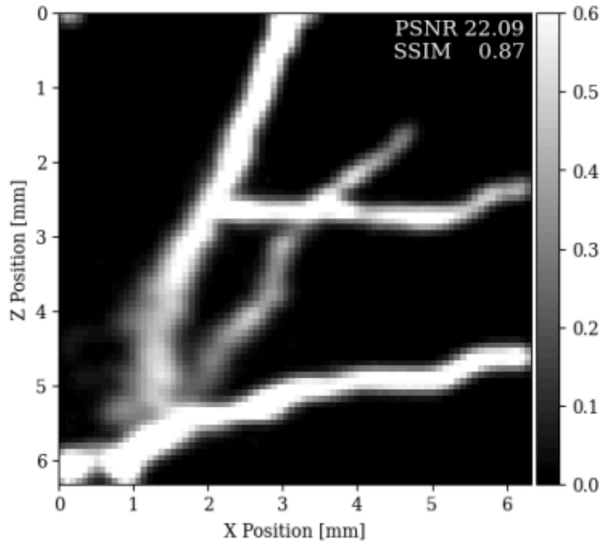
Goal: learn to sample from the conditional distribution: $p(\mathbf{x} \mid \mathbf{y})$

This describes a general inverse problem:

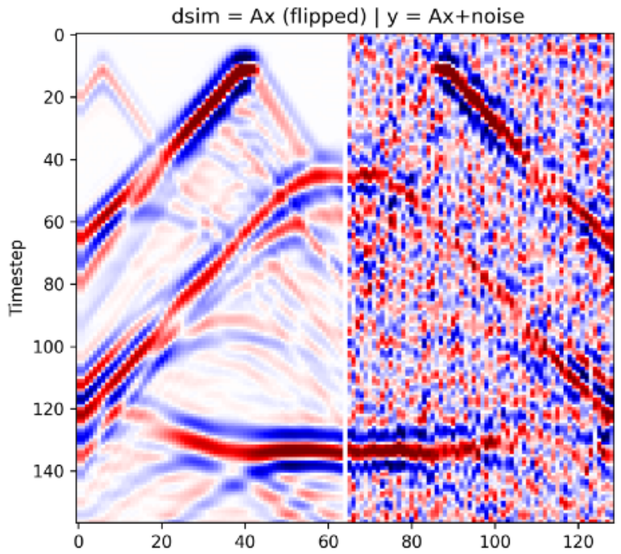
"given data $\mathbf{y}$, which image $\mathbf{x}$ corresponds to it?"

We learn the whole distribution so we answer a more powerful question:

"given data $\mathbf{y}$, ***which set of images*** $\mathbf{x} \sim p(\mathbf{x} \mid \mathbf{y})$ corresponds to it?"



Invert Forward process that gave us data



Kovachki, Nikola, et al. "Conditional sampling with monotone GANs." arXiv preprint arXiv:2006.06755 (2020).

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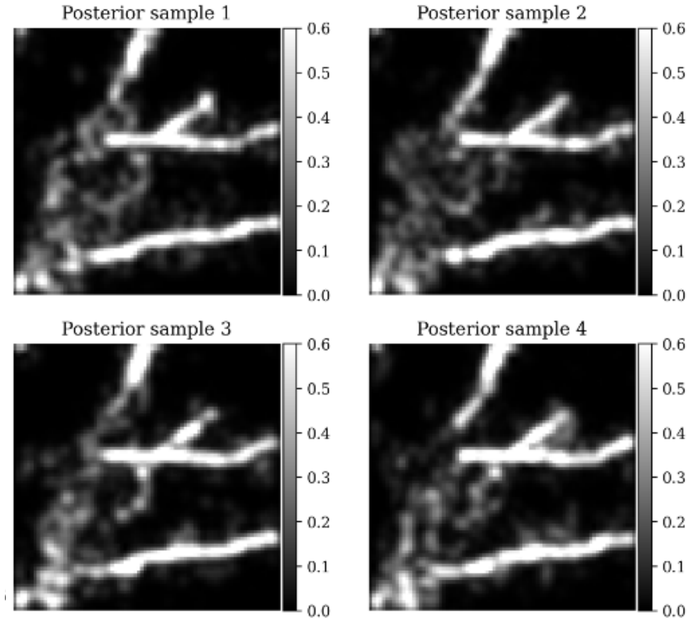

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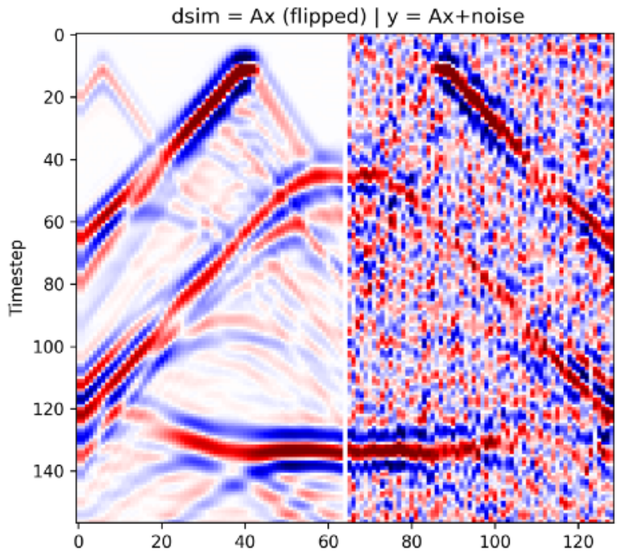

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