X2HDR: HDR Image Generation in a Perceptually Uniform Space

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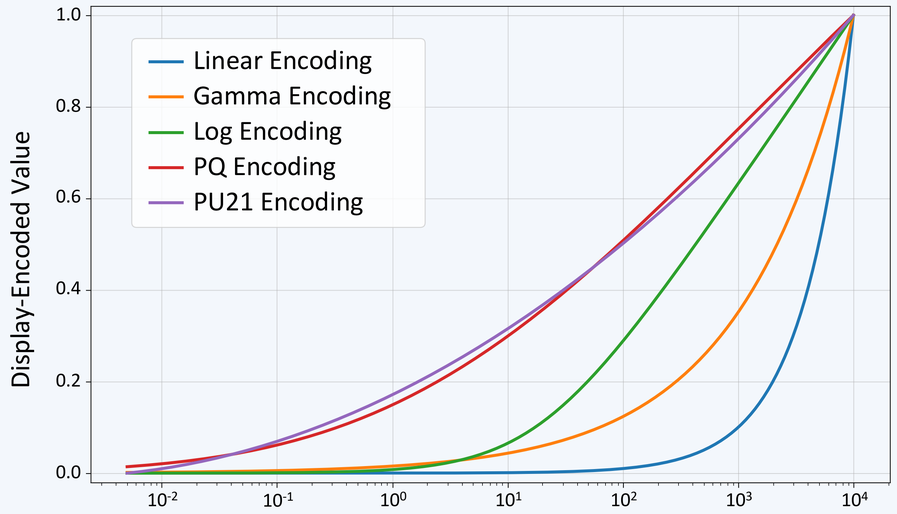
NEURAL INFORMATION PROCESSING SYSTEMS

Paper + Code

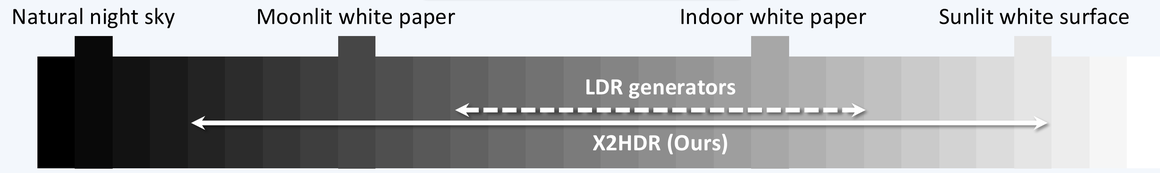
Problem

How can we adapt models pretrained on LDR content to generate HDR images and videos?

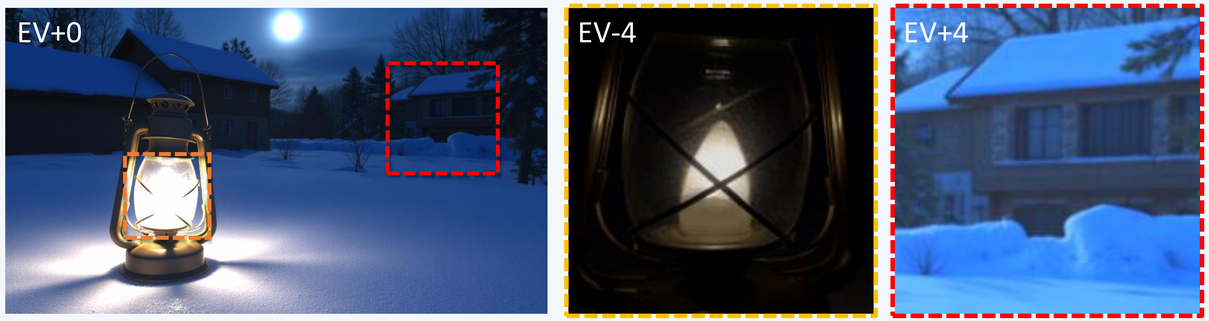
By using perceptually uniform encodings!



Dynamic Range

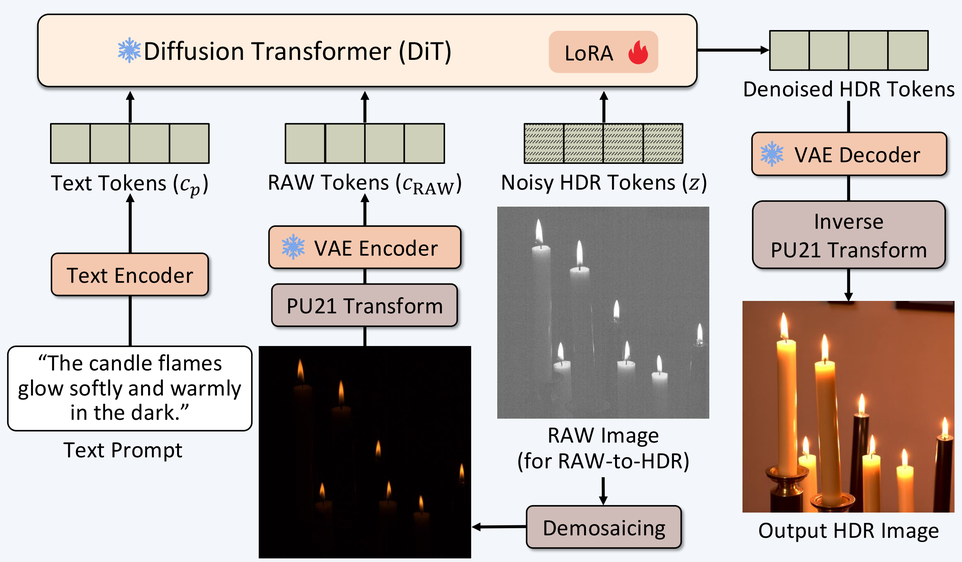


High-Dynamic-Range Image



Generated HDR image | Highlight detail | Shadow detail

Pipeline



Results

Text-to-HDR generation | RAW-to-HDR reconstruction

See the paper for more details:

Extensions | **Perceptual Study** | **Quantitative Results**