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Summary

This article discusses a potential optimization approach of visual realism evaluation that strays away from human based judgments and reference-based algorithms, as the concept is largely dependent on those limited methods. This approach involves a reference-free computational framework that essentially combines the strengths of the previously mentioned methods by characterizing such human perception, as well as doing so without the usage of actual humans in the process. The project does initially reference a dataset of 2,520 images, but instead of being reliant on those images throughout the entire process, the approach creates an effective prediction system it uses in the future based off of that dataset. The "human" aspect brought into the approach comes from its cross-disciplinary integration of methods from psychology along with computer vision and graphics.The authors look to investigate the model's usage with salient objects and those with patch distinctness, and observe its results in the future.