Poisson Image Deblurring

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Introduction

Some introuction text

Principles of K-SVD

- Want to construct the composite image, $I(x, y)$, which should agree with $T(x, y)$ and look like $S(x, y)$
- $I(x, y)$ should exactly agree with $T(x, y)$
- $I(x, y)$ "look like" $S(x, y)$ inside Ω
- If we place directly S over T and smooth over the edges, the result maybe unacceptable, due to color mismatch

K-SVD Mathematical background

A fundamental equation of **Calculus of Variations** states that, if J is defined by an integral of the form:

$$J = \int F(x, f, f_x)dx$$

Then J has a stationary value if the following differential equation is satisfied:

$$\frac{\partial F}{\partial f} - \frac{d}{dx}\frac{\partial F}{\partial f_x} = 0$$

Proposed Model

Mathematical model details

Experiment Results

some exprement results

Conclusion