Poisson Editing

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Aim

Image A

Aim

Image B

Aim
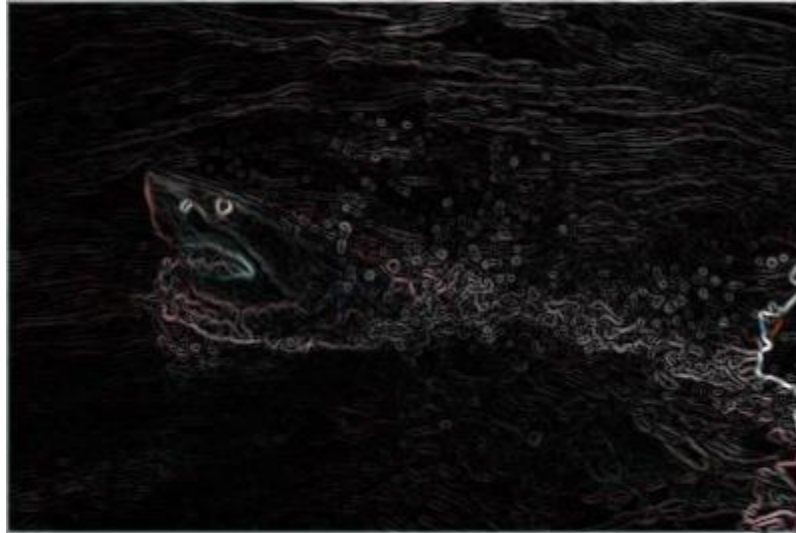

Image H (new)

Aim

Image H (new)

Aim

Image B

Aim

∇B (gradient)

Formulation

- <u>Criterion 1</u>: We want the transition between A and B to be smooth

$$H(x, y) = A(x, y) \text{ at each } (x, y) \text{ of the boundary of B}$$

- <u>Criterion 2</u>: We want to keep the details of image B, i.e. the gradients at each point

$$\nabla H(x, y) = \nabla B(x, y) \text{ at each } (x, y) \text{ inside B}$$

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$$4H(x, y) - \sum H(x + dx, y + dy) = 4B(x, y) - \sum B(x + dx, y + dy)$$