#### Leonhard Applis

# Edge Detection

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# What makes an Edge?

- Problems
- Definition
- 3 Advanced gradient-based edgedetection

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Picture of Felix vs Edges of Felix

## Problem I: Low Contrast

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Problems

Definition

## Problem II: Low Contrast

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## Problem III: Noise

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Problems

### Definition

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Problems Definition In Image Processing, an edge can be defined as a set of contiguous pixel positions where an abrupt change of intensity, gray- or color-values occur. Edges represent boundaries between objects and background. Sometimes, the edge-pixel-sequence may be broken due to insufficient intensity difference.(Malay K. Pakhira)

- - Problems
  - Definition
- Basics of gradient-based edgedetection
- 3 Advanced gradient-based edgedetection

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- 3 Advanced gradient-based edgedetection
- 4 Compass Operators
- 6 Edge Sharpening

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- **6** Edge Sharpening