Classification of Image Segmentation Algorithms

Segmentation Algorithms

Based on User Interaction

Based on Pixel Relationship

Manual
↓
Human observer

Automatic
✓

Semi-Automatic
✓
* Initialised points
* Extraction

Contextual
(region based or global)

Non-contextual
(pixel based or local)

Applications:

- Machine/Robot vision

- Color processing

- Pattern recognition

- Video processing

- Microscopic Imaging

- Image sharpening and restoration

- Medical field

- Remote sensing

- Transmission and encoding