

Image Region Segmentation

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Region Segmentation Introduction

Goal: Identify groups of pixels that go together

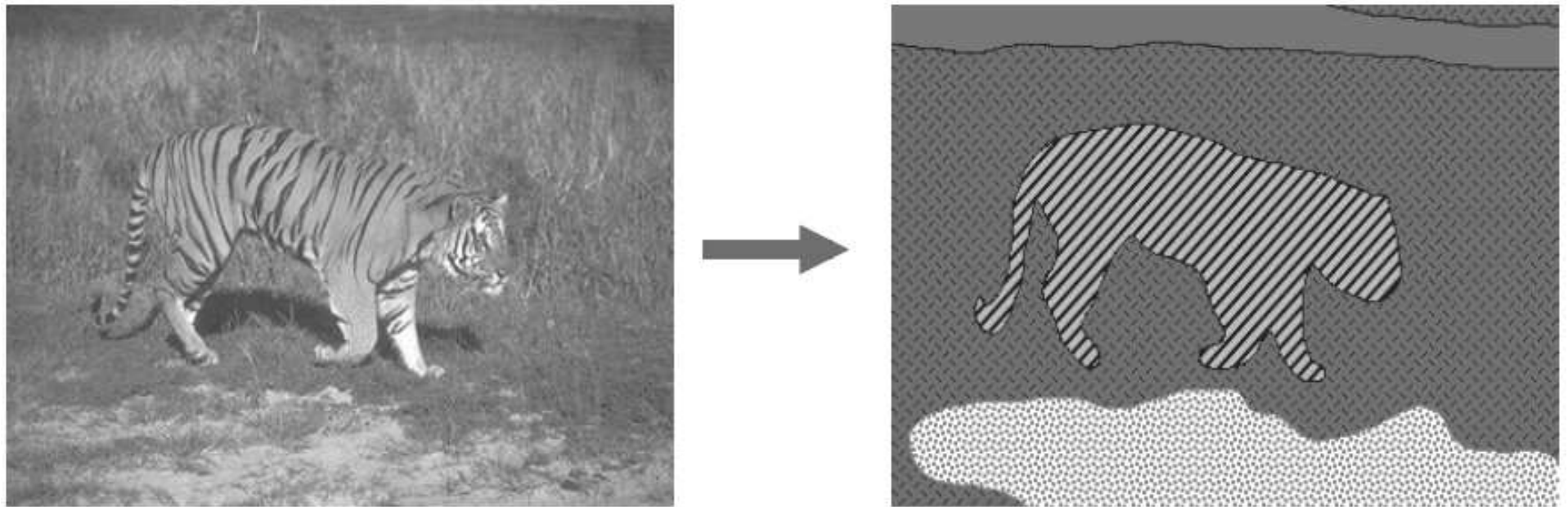


Image credit: Steve Seitz, Kristen Grauman

Regions Suggest Objects

Separate image into objects:

Image



Human segmentation

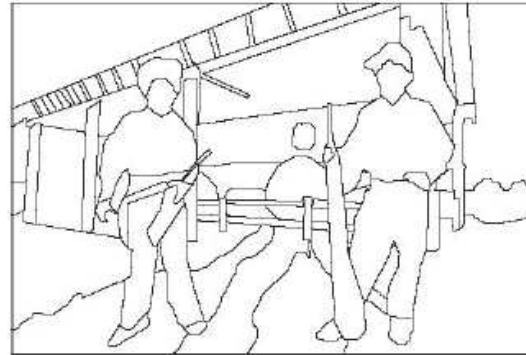
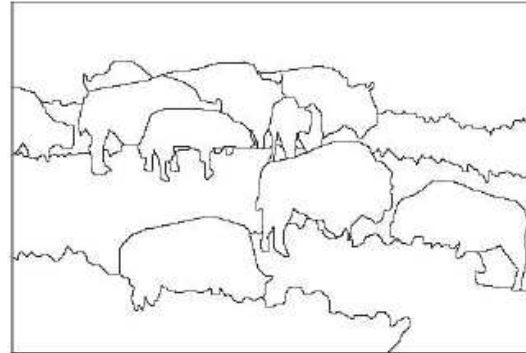


Image credit: Svetlana Lazebnik

Common Segmentation Approaches

1. **Contrast** - objects have different lightness:
thresholding
2. **Change** - objects different from background:
background models
3. **Similarity** - objects have consistent colours: colour
clustering

Lecture Overview

1. Segmentation goal - identify important objects
2. Several segmentation approaches