

Unsupervised Identification of Multiple Objects of Interest from Multiple Images: dISCOVER

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Goal

Collection of images of a scene



Discovery of **multiple** objects of interest

UNSUPERVISED!

Key Idea

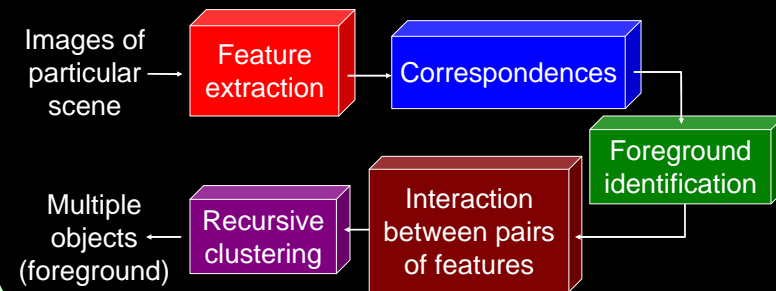
Occurrence consistency (e.g. PLSA) not enough

Geometric consistency also required

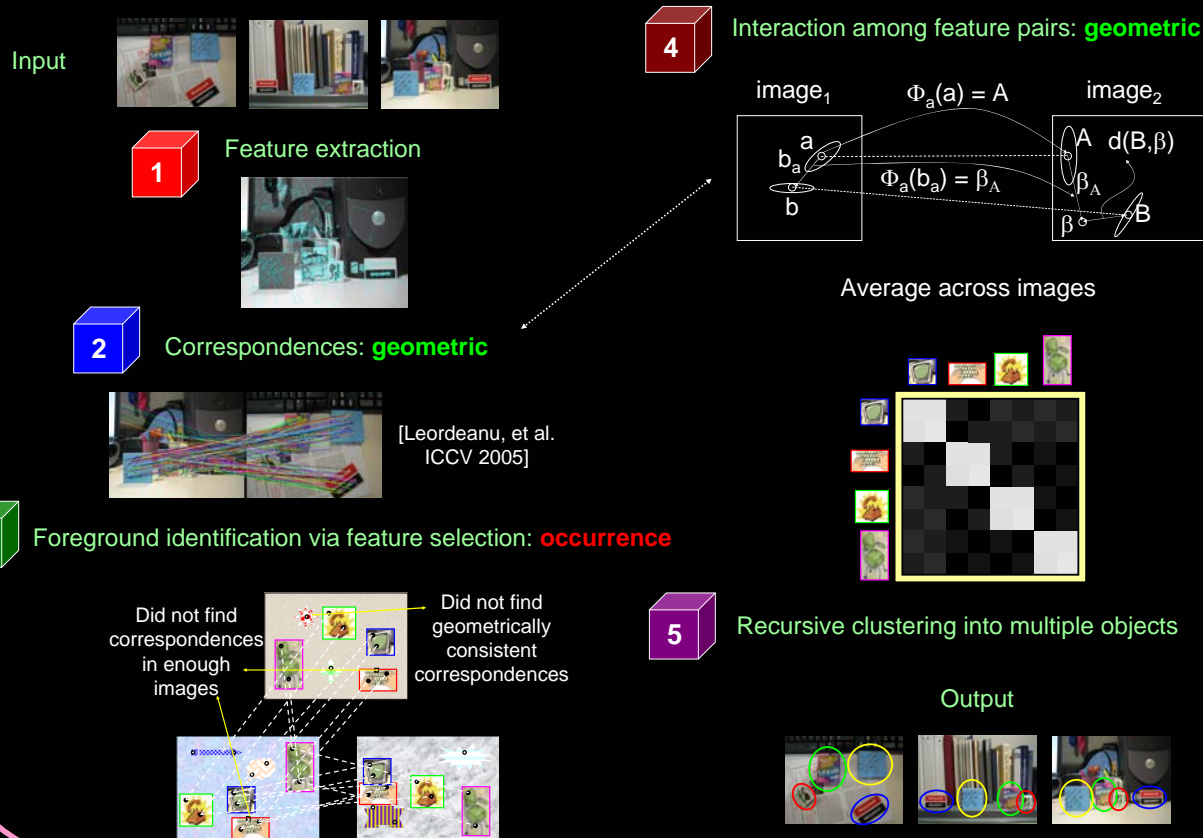
Motivations

- ❖ Better scene understanding
- ❖ Studying interaction among objects
- ❖ Learn models of objects for object detection
- ❖ Multiple object tracking in video
- ❖ Avoid extensive human labeling
- ❖ Let the data speak!

Overview of Approach

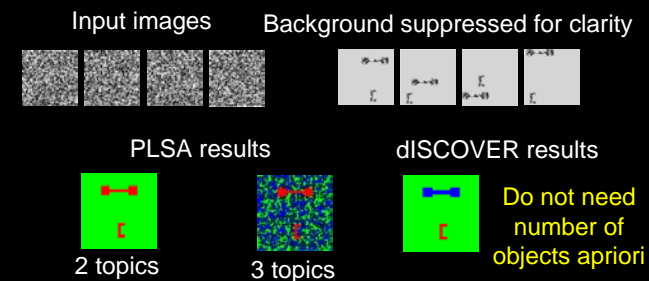


Details of Approach



Results

Synthetic experiment



Real experiments

