Activity recognition in unconstrained environment

Activity recognition (video stream):

- Stir eggs
- Read recipe

Automatic segmentation and classification of actions, emphasis on computer vision.

Planning (or not):

- Use best tool
- Use dangerous tool

Find likely action sequences the agent could perform, given prior behavior.

Unconstrained environment:

- Stir while pouring
- Stir with two utensils

Subjects not given instructions how to perform actions; realistic data sets.

Semantic information:

- Take egg from fridge...
- before using it

Use functional, temporal and state information from automatically learned domain ontologies.

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