

Call for Papers

Parts and Attributes

Workshop at ECCV 2010, September 10th 2010
<http://rogerioferis.com/PartsAndAttributes>

Overview

Recent advances in probabilistic modeling and optimization have led to a renewed interest in part-based methods for solving fundamental problems in computer vision, in particular object detection, classification, and pose estimation. Although substantial progress has been made to adequately parse objects into parts and build models to handle variations such as object pose and lighting, many open problems still remain to be solved. At the same time, part-based models for scene understanding are being developed that for the first time allow a holistic understanding of natural scenes based on local image regions and their interaction.

In parallel to part-based models, attributes based classification has recently been rediscovered, e.g. as a promising tool to overcome the problem that there are too many visual object categories to train individual classifiers for each of them. Attributes also make a more targeted search in large image databases possible, allowing e.g. queries like "person with blond hair, long nose and a red shirt". The goal of this workshop is to bring together emerging research on part-based methods and attribute-based methods. We believe there is a strong link between these two research areas which has not been previously explored.

Workshop Format

The workshop will be a one-day event with one morning and one afternoon session. Both sessions will be opened by keynote talks by renowned experts in the field. A panel discussing future directions and potential workshops that expand upon the topics of this workshop will be held in conclusion.

Call for Participation

We invite high quality, original submissions for oral presentation during the workshop. Contributions from the following areas are especially welcome:

*** Part-based Methods:**

- Localization of object parts
- Deformable and rigid part-based models
- Generative vs. discriminative part-based models
- Structured prediction for part estimation
- Context and hierarchy in part-based models

*** Hybrid Part/Attribute-based Methods**

- Semantic parsing of objects and scenes
- Joint learning of object parts and attributes

*** Attribute-based Methods:**

- Learning visual attributes across object classes
- Attribute-based classification with few examples
- Semantic attributes as object representations

*** Applications:**

- Object detection and recognition
- Visual image search
- Soft-biometrics
- Innovative applications of parts and attributes

We also invite submissions from related domains including theoretic results relevant to the workshop's topic.

Papers must be in PDF format and should not exceed 14 pages (ECCV format). All submissions are subject to a double-blind review process by the program committee. Further details can be found on the workshop homepage.

Important Dates

- * Deadline for submission of papers: June 16th, 2010
- * Notification of acceptance: July 9th, 2010
- * Final version of submission: July 14th, 2010
- * Workshop date: September 10th, 2010

Workshop Organizers

- * Rogerio S. Feris, IBM <rsferis@us.ibm.com>
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