



Third Semantic Robot Vision Challenge

A Special Track of the

5th International Symposium on Visual Computing (ISVC09)

<http://www.isvc.net>

Scope:

The Semantic Robot Vision Challenge (SRVC) is a research competition that is designed to advance the state of the art in embodied vision, active scene understanding, and automatic acquisition of knowledge from the Internet. This competition is an indoor robotic photo scavenger hunt. Teams will be required to demonstrate a robot that has the ability to:

1. Read and parse a textual list of generic or specific objects to be found in the environment, e.g. "upright vacuum cleaner", "frying pan", or "Ritz Crackers".
2. Autonomously connect to the Internet and build an object classification database from images or other information related to the listed objects, in a set amount of time.
3. Autonomously navigate and search the unknown environment with the task of taking snapshots of the listed objects using the data acquired from the Internet.
4. Return an image of each object type containing a single bounding box around the pictured object.

Unlike with computer vision competitions, participants must address many issues of embodied vision. Robots must recognize objects in lighting conditions and configurations that can give them very unusual appearance, but can use navigation to look at objects from angles that are close to the canonical views used in Internet images. Also, as in the real world, scene context can be used to guide the search for objects to areas that make the most sense for them to be found (e.g. a stapler is usually found on a desk rather than on the floor or on a wall). In this competition, objects in the scene will be placed in a way that should improve recognition results for robots that take advantage of scene context understanding.

Leagues:

- *Robot league*: Teams bring their own robot to participate in the event.
- *Software league*: Teams bring only a computer to run their software. For the software

league, the visual data is collected immediately before the event by a robot run by the organizers.

See <http://www.semantic-robot-vision-challenge.org> for more details on participation and qualification, as well as for source code shared by participants of SRVC 2007 and 2008. Please send the organizing committee an email if you would like more information and if you would like to be added to the SRVC email list.

Important Dates:

Deadline for Submission of Qualification Material	September 14, 2009
Notification of acceptance	September 28, 2009
ISVC09 Symposium	November 30 - December 2, 2009
Competition Day	December 1, 2009

Organizing Committee:

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