SRV Challenge Meeting Minutes: February 16, 2006

Attendees: Scott H., David M., Per-Erik F., Dave, Matt B., Kevin, Kenji, Wei-lun (sp?), Tristram

Missing: Julia F., Simon, Marius, Ara

Decided on Fridays 11:00-12:30 for meeting time
Scott will e-mail to ask about our time constraints for project contributions
Julia may not be available after May

Task Decomposition:

Training Data Acquisition and Training (1:00)
- Text processing and analysis
- Data acquisition
- Training of the classifier

Test Data Acquisition (0:15)
- Robot Navigation
- Attention / Camera control
- Segmentation

Image Processing and Classification (0:30)
- Find objects in images
- Identify them

Question for organizers: Does the robot's computer if used solely for navigation count as a computer? Can we use a computer in addition to the robot's?

Classifier representation and training must be informed by training data source.

Optical character recognition could be used

Decided on Linux and c/c++

Scott and Sancho will keep integration in mind

At test time, the classifier will work on folders of images, each containing multiple images of a single of a single object from the room

Question for organizers: Ask about the skid-steer restriction and if our robot will be okay

Need a camera extension for the robot

One possible physical set up for vision system:
- Pan/Tilt stereo bumblebees for navigation and segmentation of possible objects during run
- Digital still camera for high resolution shots of objects

Question for organizers: is this set up acceptable?

To Do
- Tristram: finding out about tower mounting on the robot by Feb 23
- David M: Find out how much extra processing / memory is available while navigating using SLAM and just using laser mode exploration.
- Per-Erik: Bumblebee Samples
- Tristram: Report on Google Image API
- Kevin: would like to work on the robot side of the project
- Sancho: Report on still camera specs