

cram_3rdparty

3rd party Lisp libraries wrapped into ROS packages:
alexandria, babel, cffi, cl_store, cl_utilities, fiveam,
lisp_unit, gsd, gsll, trivial_garbage, yason, etc.

cram_core

Tools and Interfaces for writing Cognition-Enabled
Reactive Concurrent Plans

cram_utilities: extending Lisp with Lazy Lists, pattern matching, etc.
cram_language: language constructs for reactive concurrent plans
cram_designators: interfaces for symbolically describing entities
cram_reasoning: symbolic reasoning engine (Prolog) implementation
cram_process_modules: interfaces for grounding plans in hardware
cram_execution_trace: logging (serializing) mechanism for plans
cram_projection: interfaces for lightweight simulation of plans
cram_math: extending Lisp with math utilities (prob. distributions...)
cram_test_utilities: extending Lisp with CRAM-specific testing utils

knowrob

Core packages of the
robotics knowledge
processing tool:
<http://knowrob.org/knowrob>

roslisp

Tools for developing ROS
packages in Common Lisp:
packaging tools, ROS
protocols implementation

roslisp_common

Lisp implementation of ROS
libraries:
TF, TF2, ActionLib, URDF
Parser, etc.

cram_json_prolog

ROS JSON Prolog client
implementation in Lisp:
sending Prolog queries in
JSON format over ROS

cram_highlevel

High-level CRAM functionality including the plan library, integration
with ROS protocols and libraries,
symbolic description/resolution methods

location_costmap: resolving location description by sampling from distributions
cl_semantic_map_utils: reading semantic maps from KnowRob through JSON
semantic_map_costmap: describing locations using environment semantic map
cram_plan_library, *cram_plan_knowledge*, *cram_plan_failures*: plan library
cram_roslisp_common: registers ROS init functions upon loading the package
designators_ros: combining designators with poses stamped of TF, etc.

cram_physics

Bullet physics engine-based and OpenGL offscreen rendering-based
reasoning mechanisms and lightweight simulation of PR2 robot

cl_opengl, *cl_glx*: OpenGL Lisp interface
cl_bullet: Bullet physics engine Lisp interface
cl_bullet_vis: visualizing Bullet world using OpenGL
bullet_reasoning, *bullet_reasoning_designators*: using Bullet in CRAM for
reasoning about stability, visibility, collisions, etc
spatial_relations_costmap: symbolically describing object spatial relations
cram_pr2_knowledge, *pr2_desc_lowres*, *pr2_proj_proc_mods*: PR2 knowledge

cram_boxy

Hardware interfaces for
using Boxy robot in CRAM

cram_pr2

Hardware interfaces for
using PR2 robot in CRAM

cram_projection_demos

Using CRAM in lightweight
simulation mode