Utils

**Short description**

A collection of utilities used by most other packages.This package should contain all functionality which is useful in more than one package.

**Executables**

constants\_generator (only used internally)

**Dependencies**

* roboteam\_msgs
* googletest: https://github.com/google/googletest

**Globals**

**-**

**Params**

**-**

**Input topics**

**-**

**Output topics**

* view\_debug\_lines
* view\_debug\_points
* view\_debug\_arcs

All of these are used to draw things in rqt\_view.

**Details**

The most notable files include:

* Cone: A cone-shaped area class used in a number of skills
* Draw: Used to draw figures in the rqt\_view GUI.
* LastRef / LastWorld: Provide access to the game state.
* Math: Mathematical utilities
* Optimization: Generic gradient descent
* Position: A pair of (x,y) coordinates plus rotation
* Section: A line section. Essentialy a quad (x1, y1, x2, y2)
* TeamRobot: A simple way to identify a robot: the id number + team
* Vector2: A pair of two numbers, with a lot of linear algebra built in.