ROS cheatsheet

Basic Commands

Start applications

```
roscore                                      start the Master
rosrun [pkg] [node]                          start a node
roslaunch [pkg] [launch] [arg]:=[value]}     start a launch file
```

topic

```
rostopic list                    list active topics
rostopic echo [topic]            print messages
rostopic info [topic]            info (type, pubs, subs)
rostopic hw [topic]              publishing rate
rostopic bw [topic]              bandwidth used
rostopic find [type]             find nodes by type
rostopic pub [topic] [type] [arg]  publishing topic
```

service

```
rosservice list                list active services
rosservice info [service]      info (type, pubs, subs)
rosservice find [type]         find services by type
rosservice call [service]      call a service
```

param

```
rosparam  list                 list of parameters
rosparam  get [param]          get a parameter
rosparam  set [param] [value]  set a parameter
rosparam  delete               delete a parameter
rosparam  dump [file.yaml]     save parameters set to .yaml file
rosparam  load [file.yaml]     load parameters from .yaml file
```

Data Structure

msgs

```
rosmsgs list                 list msg
rosmsgs info                 info
rosmsgs package [pkg]        msg in a pkg
rosmsgs package [msgs]       pkg containing the msg
```

srv

```
rossrv list                list srv
rossrv info                info
rossrv package [pkg]       srv in a pkg
rossrv package [msgs]      pkg containing the srv
```