3. 3. Voice control car movement

3.1. Description

Realize voice control car forward, backward, parking, turn left, turn right and light strip effects.

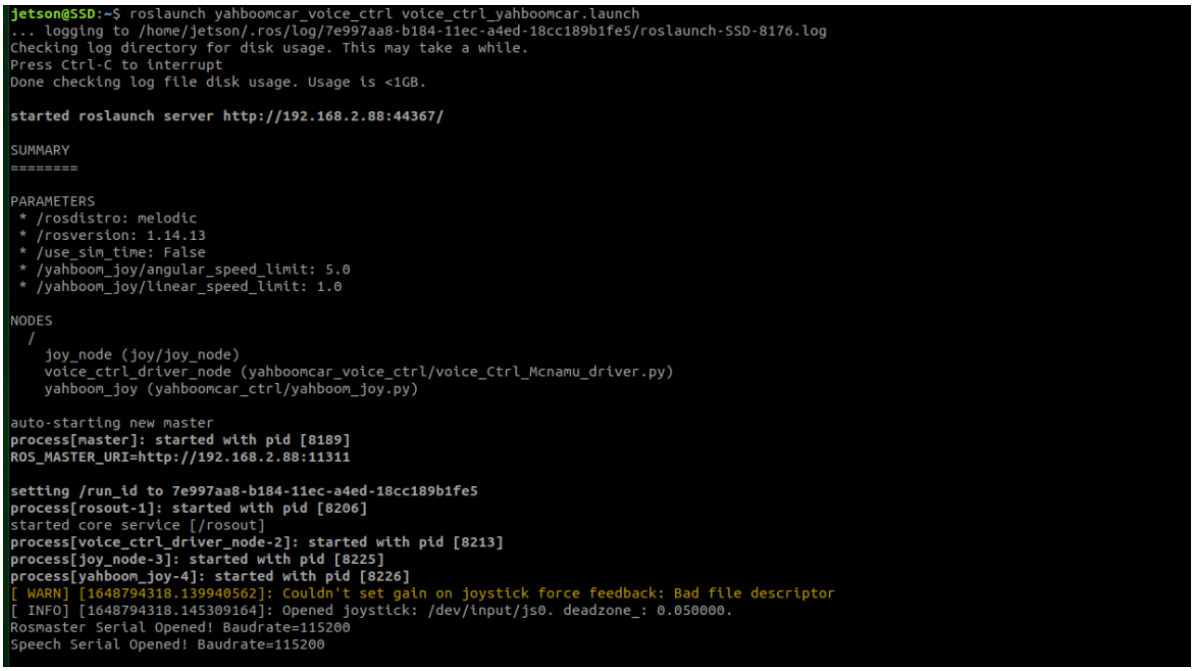
3.2. Start function

3.2.1. function package path

```
~/yahboomcar/src/yahboomcar_voice_ctrl/
```

3.2.2. start

```
#You need to enter docker first, perform this step more
#If running the script to enter docker fails, please refer to 07.Docker-orin/05,
Enter the robot's docker container
~/run_docker.sh
roslaunch yahboomcar_voice_ctrl voice_ctrl_yahboomcar.launch
```



Core code analysis:

1. import the library of speech recognition

```
from Speech_Lib import Speech
from Rosmaster_Lib import Rosmaster
```

2) Create speech recognition objects and drive control objects

```
spe  =  Speech()
car  =  ROsmaster()
```

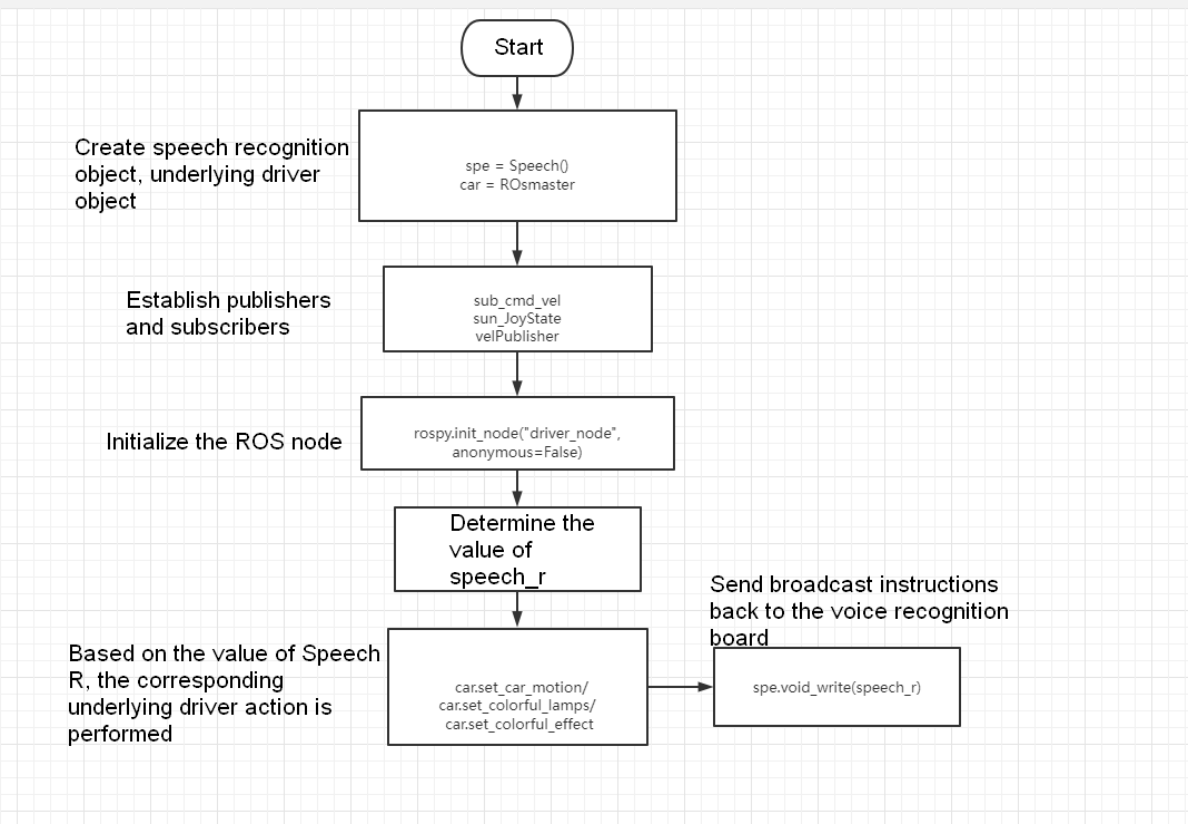
3. read the content recognized by the voice

```
speech_r  =  spe.speech_read()
```

4. send voice broadcast content

```
spe.void_write(speech_r)
```

Program flow chart:



The specific code can refer to

```
~/yahboomcar/src/yahboomcar_voice_ctrl/scripts/voice_Ctrl_Mcnamu_driver.py
```

3.3. Voice control car

Say "Hi Yahboom" to ROSMASTER.

Waiting until the voice module reply "Hi , I'm here.".

We can control the car according to the commands in the table below.

3.3.1. Movement state

function word	Speech Module Recognition Results	Voice broadcast content
Robot stop	2	OK , I'm stop.
Go ahead	4	OK , let's go.
Back	5	OK , I'm back.
Turn left	6	OK , I'm turning left.
Turn right	7	OK , I'm turning right.
Enter A mode	8	OK, I'm working on A mode.
Enter B mode	9	OK, I'm working on B mode.

3.3.2. Light strip effect

function word	Speech Module Recognition Results	Voice broadcast content
Close light	10	OK, light is closed.
Red light up	11	OK, red light is on.
Green light up	12	OK, green light is on.
Blue light up	13	OK, blue light is on.
Yellow light up	14	OK, yellow light is on.
light A	15	OK, light A is on.
light B	16	OK, light B is on.
light C	17	OK, light C is on.
Display battery value	18	OK, battery value has been display.