General Report

Mar/30/2017

Wentao Bi

Original idea: D\*+VFH

* Global path planning: D\* (or any other global path planning algorithm)
* Local path planning: VFH (or any other local path planning algorithm)

New idea: D\*+(CPI+BPNN)+VFH

* Global path planning: D\* (or any other global path planning algorithm)
* Using BP-NN and Cubic Spline Interpolation(CPI) to make trajectory smoothly section by section.
* Local path planning: VFH (or any other local path planning algorithm)

Process:

We use CPI to fit the whole path through getting from D\*, then we fit the trajectory section by section compared with global path until the robot get the target.

e

c

bdb

b’

a’

g

a

f

d