

Readme for MOOS Codes

1. In directory “controller”, there are following three files:

controller.cpp: calculate input of two motors

controller.moos: configuration file for controller.cpp, desiredTrajectory.cpp, and vehicle.cpp

CMakeLists.txt: a file for compiling controller.cpp

2. In directory “desiredTrajectory”, there are following three files:

desiredTrajectory.cpp: calculate the desired trajectory and its derivative

controller.moos: this file is the same file as the file in the directory “controller”

CMakeLists.txt: a file for compiling desiredTrajectory.cpp

3. In directory “vehicle”, there are following three files:

vehicle.cpp: simulate the dynamics of the vehicle

controller.moos: this file is the same file as the file in the directory “controller”

CMakeLists.txt: a file for compiling vehicle.cpp

To run these codes, you can do as follows.

1. In a terminal, go to directory “build” and run following command

```
ccmake ../src
```

2. Run the command

```
make
```

3. Run the following commands in different terminals

```
./MOOSDB
```

```
./desiredTrajectory controller.moos
```

```
./vehicle controller.moos
```

```
./controller controller.moos
```