cmake\_minimum\_required(VERSION 2.8.3)

project(turtlebot\_actions)

# Load catkin and all dependencies required for this package

find\_package(catkin REQUIRED COMPONENTS cmake\_modules roscpp actionlib actionlib\_msgs geometry\_msgs message\_generation tf cv\_bridge image\_transport image\_geometry)

find\_package(Boost REQUIRED COMPONENTS system)

find\_package(cmake\_modules REQUIRED)

find\_package(Eigen REQUIRED)

find\_package(OpenCV REQUIRED)

include\_directories(include ${Boost\_INCLUDE\_DIRS} ${catkin\_INCLUDE\_DIRS} ${EIGEN\_INCLUDE\_DIRS} ${OpenCV\_INCLUDE\_DIRS})

# actions

add\_action\_files(

DIRECTORY action

FILES FindFiducial.action

TurtlebotMove.action

)

## Generate added messages and services with any dependencies listed here

generate\_messages(

DEPENDENCIES

actionlib\_msgs

std\_msgs

geometry\_msgs

)

# building c++ executables and libraries

add\_executable(turtlebot\_move\_action\_server src/turtlebot\_move\_action\_server.cpp)

target\_link\_libraries(turtlebot\_move\_action\_server ${Boost\_LIBRARIES} ${catkin\_LIBRARIES})

add\_dependencies(turtlebot\_move\_action\_server turtlebot\_actions\_gencpp)

add\_executable(find\_fiducial\_pose src/find\_fiducial\_pose.cpp src/detect\_calibration\_pattern.cpp)

target\_link\_libraries(find\_fiducial\_pose ${Boost\_LIBRARIES} ${catkin\_LIBRARIES} ${OpenCV\_LIBRARIES})

add\_dependencies(find\_fiducial\_pose turtlebot\_actions\_gencpp)

# what other packages will need to use this package

catkin\_package(

DEPENDS eigen opencv

CATKIN\_DEPENDS roscpp actionlib actionlib\_msgs geometry\_msgs message\_runtime tf cv\_bridge image\_transport image\_geometry turtlebot\_bringup

INCLUDE\_DIRS include

)

#############

## Install ##

#############

## Mark executables and/or libraries for installation

install(TARGETS turtlebot\_move\_action\_server find\_fiducial\_pose

ARCHIVE DESTINATION ${CATKIN\_PACKAGE\_LIB\_DESTINATION}

LIBRARY DESTINATION ${CATKIN\_PACKAGE\_LIB\_DESTINATION}

RUNTIME DESTINATION ${CATKIN\_PACKAGE\_BIN\_DESTINATION}

)

## Mark cpp header files for installation

install(DIRECTORY include

DESTINATION ${CATKIN\_PACKAGE\_INCLUDE\_DESTINATION}

)

## Mark executable scripts (Python etc.) for installation

install(PROGRAMS scripts/test\_fiducial.py

scripts/test\_move.py

DESTINATION ${CATKIN\_PACKAGE\_BIN\_DESTINATION}

)

install(DIRECTORY launch

DESTINATION ${CATKIN\_PACKAGE\_SHARE\_DESTINATION}

)