

Mission Manual

Tele-Operation Quad-Walking



Hongfei Wang



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Event Summary

(Updating soon...)

Visionary Perception

(Updating soon...)

Motion Planning

Software used:

We have been using two different motion planner, which are:

1. Full-body IK developed by Inhyeok Kim(Hubo lab, KAIST), OpenHubo
2. ROBOSim developed by IU

(Updating soon...)

Execution

People to contact:

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Software packages used:

1. Hubo-ach:
 - <https://github.com/hubo/hubo-ach.git>
2. Hubo-read-trajectory:
 - <https://github.com/hubo/hubo-read-trajectory.git>
3. HUBO_work:
 - https://github.com/lserenemaomaol/HUBO_work.git

How to run the trajectory on the robot:

1. Install all the dependencies into one folder named "Yourfolder"
2. In "Yourfolder"/src/tele-quad.cpp, make sure that the location of Hubo-read-trajectory is correct.
3. Start Hubo-ach by running:
 - "sudo hubo-ach start drc"
4. In terminal, run:
 - "make tele_quad"
 - "sudo ./tele_quad"
5. Now, you can do tele-operation of quad_walking. The function keys are defined as follows:
 - h: Help
 - w: Move forward
 - a: Turning to the Left
 - s: Move backward
 - d: Turning to the Right
 - q: Side walk Left
 - e: Side walk Right
 - c: Climb up

※ Refer to the video shown below to see the anticipated result via tele-op:

<http://youtu.be/NH65iAlvLVQ>