Robotis OP3 Research

Saturday, January 26, 2019 3:29 PM

Challenges

- Potentially steep learning curve for Gazebo simulator, if needed

Roadblocks

- Need access to robot to fully test code. May provide challenge for team collab., but simulator may provide enough testing

Requirements

- Improve the vision recognition algorithm of the OP3 to better distinguish the ball from its environment
    - Current algo identifies ball by color and Hough Circle Transform
- Add feature for pose saving and playback in OP3
    - Current demo program tracks human skeleton with usb cam and mimics pose
    - Need to be able to save and playback pose sequence?

Notes

- Code is all c++
- Heavy codebase, but working with only a subset
- Linear algebra stuff (cool)

Repo

Main Repo for OP3: https://github.com/ROBOTIS-GIT/ROBOTIS-OP3
Student pose demo: https://github.com/Seri-Lee/robotis_op3_following_motion
Repo for Soccer demo: https://github.com/Seri-Lee/robotis_op3_following_motion