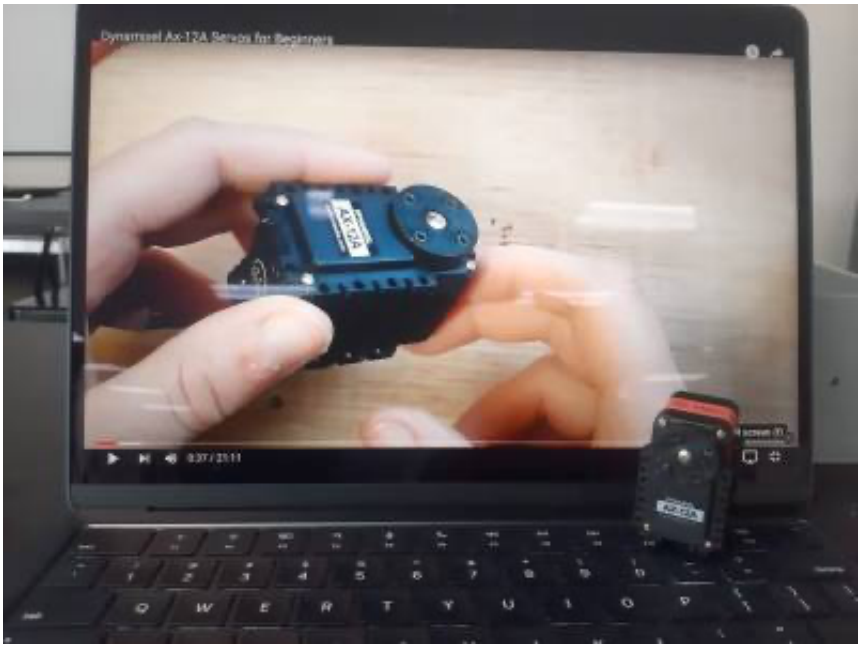
DASL Wiki

Week 2 at DASL : Keep Trying

Photo of the week

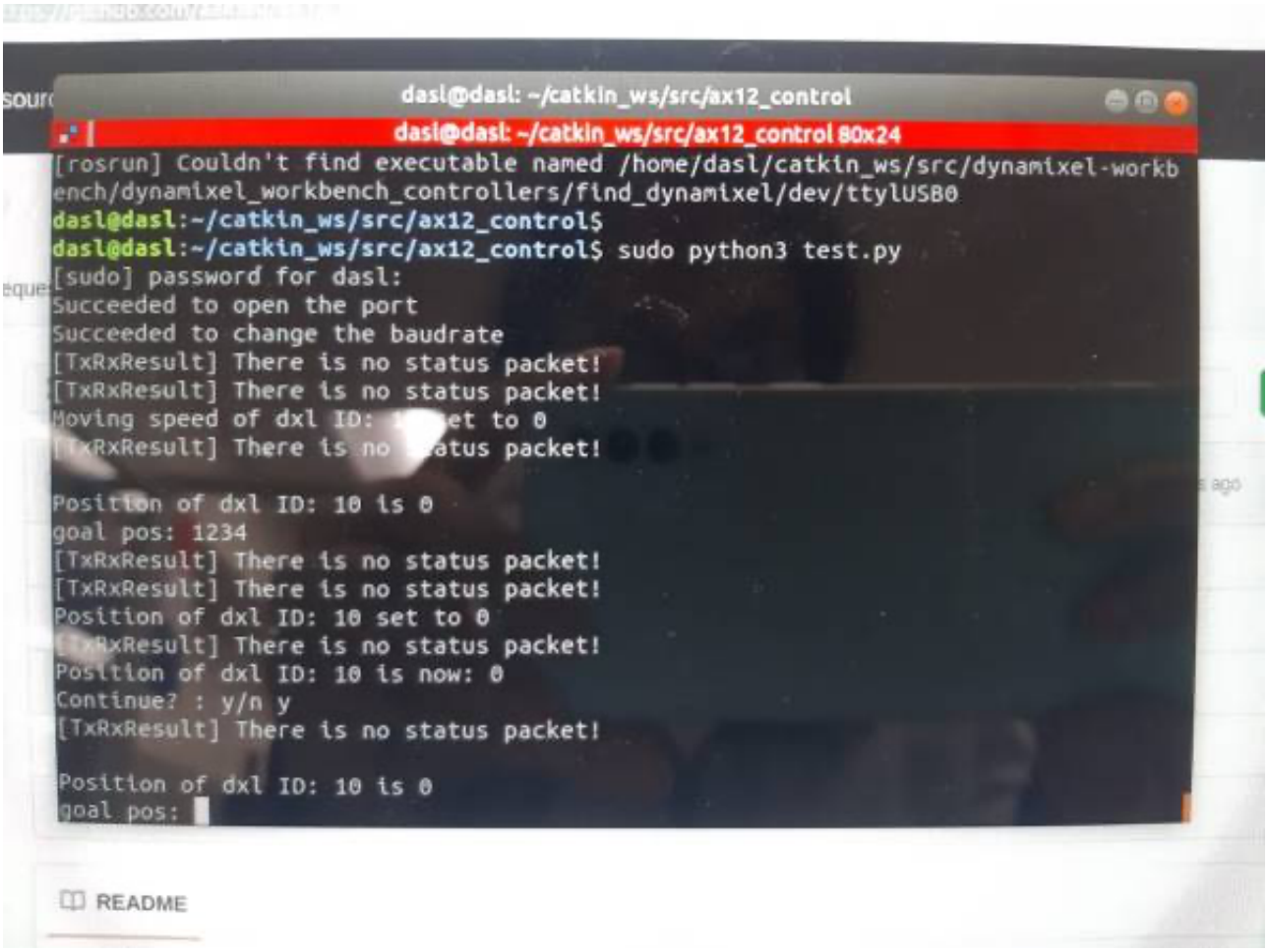
It finally worked ! It's my maiden assembly which I myself designed using Fusion 360 and assembled it, attached motored to the drums. Still there was a need to use tape to stick the lid ! Initial prototype of End Effector failed since drums were not moving at all. Another (second one)failed because there were no proper space for attaching motors to it. Then after proper and organized thinking I designed this third prototype which finally worked ! After attaching motors to End Effector, which was quite tedious task since holes of motors through which I have to attach it to drum/shaft in end effector were small. This task tested my patience a lot but after successful attempt, I assembled it properly. Now it was time ti test the motion ! Zahir asked me to download Dynamixel Wizard (motors used in this experiment are Dynamixel AX-12 motors. Dynamixel wizard is an interface with which after making proper hardware connection we can maculate motor's torque, speed, rotation and multiple things).



Zahir guided me to manipulate the motors configuration.

Next step was to manipulate these configurations using ROS package Dynamixel SDK.

Our classes at the lab are taking grip now ! I enjoyed C++ and ROS class. It was all new to me , but I picked it up ! After getting proper hols of ROS I wrote a code in Python and tried manipulating the motor speed. Alas it failed due to some error I am eager to figure it out what actually went wrong.



End effector is one of the component of my project. Another challenging ting is Projectile Launcher. after visiting different sites on browser I tried designing one launcher which was using spring energy to project the object. I 3D printed it bit it was not giving enough thrust. Spring was very delicate to provide required thrust.Then at one night I suddenly got an idea. I took one tissue paper paper's cardboard roll, attached it with a rubber (that rubber belonged to my new scrunchy) and used it to throw one light weighted paper ball. It worked! It was just a raw model. Now th task is to get components 3D printed !

This weekend was all fun ! Me with my Indian colleagues visited Los Angeles. It was road trip ! This visit helped me to self introspect and unwind ! Weather in LA was to die for …

I met one girlie who was working in one of the hotels of Santa Monica beach ! She was so nice and what I observed is she was so humble to each and every customer entering. she was serving everybody not only food but also with happiness. Her name is Roomie !

I realized that the more I show intend to work, more help and support I will receive. Atmosphere in DASL is very conducive for once growth. Growth not only in Knowledge but as a good human being ! Self learning is the only key to

reach but at the same time one do have limitation for it because of lack of experience, knowledge and maturity. One should understand this and should be able to ask for help and should be ready to accept it !

Long way to, beautiful journey !

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suhani_week_2.txt · Last modified: 2024/08/16 11:58 by suhanik