Turtle Following Ball
Orangewood Assignment

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There are file scripts in this module

1. **ball_motion_movie.cpp** : This generates the video of a ball following a lemniscate.

2. **publish_video_feed.cpp** : This script takes the generated video and publishes that on the ros topic **/image/ball_animation.**

3.**ball_pose_publisher.cpp** : This script subscribes to the topic /image/ball_animation and then calculates the centre points of the ball using openCV and then publishes that coordinates to the topic **/turtle/move_pose.**

4. **turtle_controller.cpp :** This takes the message from /turtle/move_pose and then gives commands to the turtle to move on a lemniscate.

The launch file **start_controller.launch** runs the node ball_pose_publisher, turtle_controller and also turtlesim_node.