

Record a dataset for LSD SLAM

- Connect your webcam (preferably the Genius Widecam F100) to your laptop via USB.
- Launch the gscam ROS driver by running
roslaunch gscam gscam_640_480.launch
This launchfile will downsample the full HD image to a resolution of 640x480, as this works best for LSD SLAM
- Start recording the camera image by running:
rosbag record /tf /camera/image /camera/camera_info
- LSD SLAM renders the best results if you move the camera sideways. Therefore, it is best to **circle around the room** with your back to the wall, while facing the camera to the wall on the opposite side of the room.
- Follow that trajectory **a few times** (at least twice). Later, when you run the LSD SLAM algorithm, this will result in **loop closures**.
- When you finished, stop the recording by typing CTRL+C in the terminal.