

ROB521

Assignment 3

Syed Kamran

Engineering Science, Robotics

Student Number: 1001725181

April 7, 2019

Visual Odometry

In Figure 1, we can observe that the robot was able to estimate its motion really well compared to ground truth. The error can further be minimized by improving calibration of the camera. In Figure 2, we can observe the overall estimated distance moved by the robot. This distance looks fairly similar to the solution image and illustrates that the robot can accurately calculate its change in motion based on the stereo images it takes.

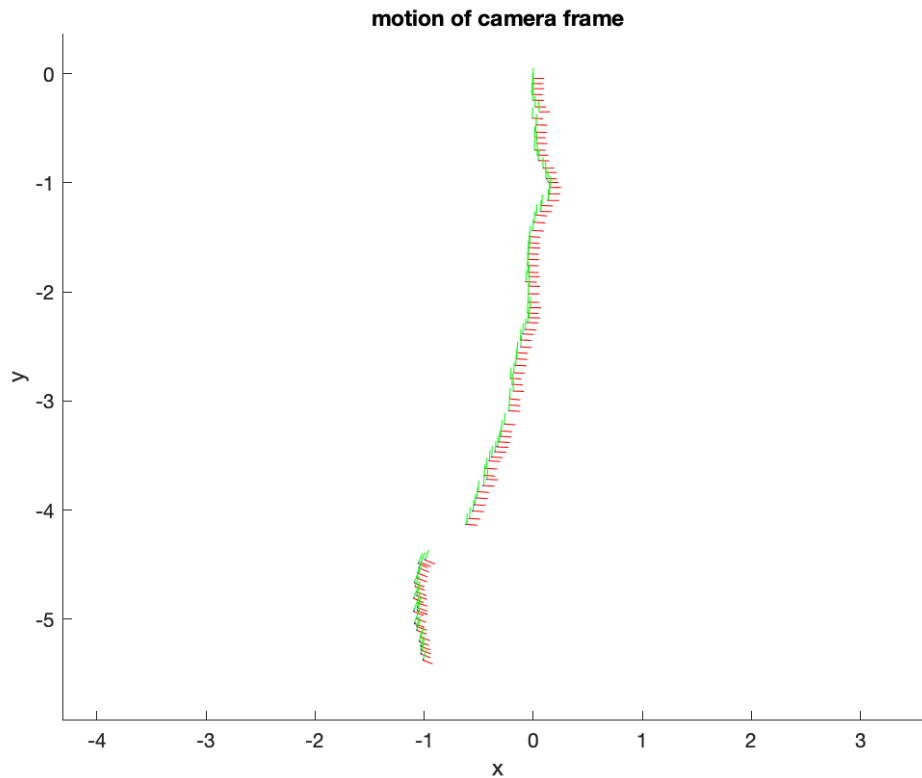


Figure 1: Motion of Camera Frame

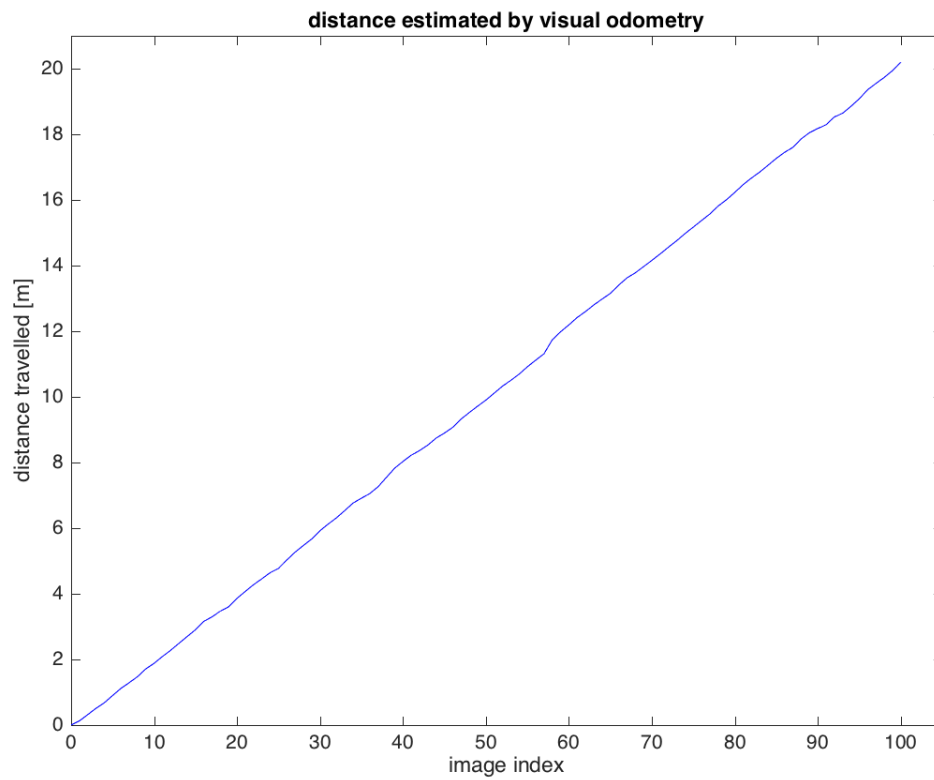


Figure 2: Distance Estimated by Visual Odometry