

Lab 2: Odometry

CSCI 3302: Introduction to Robotics

Scoring Rubric :: 100pts

Write-up (30pts max):

Expected state machine states –

1. Speed measurement
2. Line following

Deduct 10pts if speed measurement is missing.

Deduct 10pts if line following/loop closure is missing. The robot will stay in this state

Deduct 3pt if speed is outside the range 0.1-0.15m/s.

Deduct 3pts if ideal expected pose at start line is (0,0,0)

Code (70pts max):

Deduct 30pts if it doesn't compile.

Deduct pts per state that it doesn't reach/isn't complete

- Start with speed measurement (10 points)
- Line Following (30 points)
 - o Start line detection and Loop Closure (3pts)
 - o Drive forward based on center ground sensor (3pts)
 - o Rotate counterclockwise based on left ground sensor (5pts)
 - o Rotate clockwise based on right ground sensor (5pts)
 - o Rotate counterclockwise in place when sensors don't detect line (5pts)
 - o Odometry code (9pts)

Deliverable: {Names, Grade, Justification Text} for each group

Brad Hayes, Alessandro Roncone	62	Writeup: (-3) speed range outside 0.1-0.15m/s Code: (-35) Code doesn't compile
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