

Fig 1. Wiring Diagram of paperbot

Fig 2. The actual appearance of paperbot

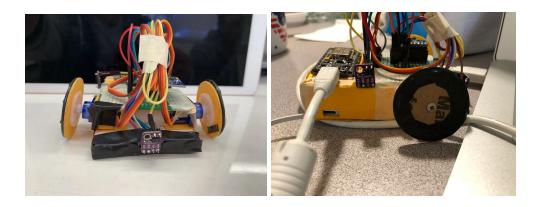


Fig 3. The front Laser Range Sensor

Fig 4. The right Laser Range Sensor



Fig 5. The IMU Magnetometer

Simulations

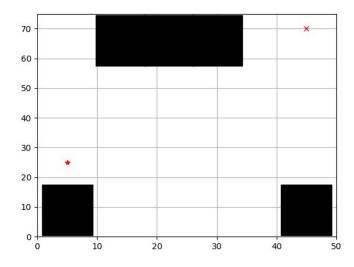


Fig 8. Visualization of environment with obstacles, initial and goal states

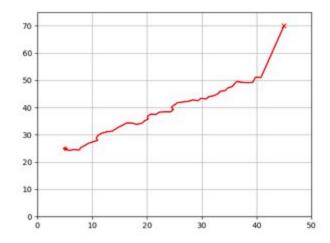


Fig 9. A smooth achievable trajectory from the initial state towards the target

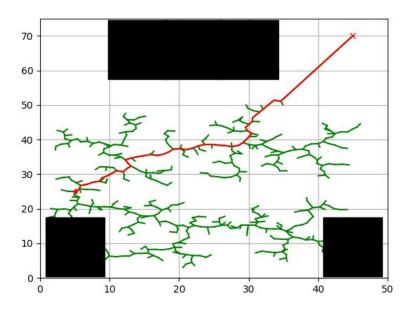


Fig 12. A trajectory from a specified initial state to the desired goal state

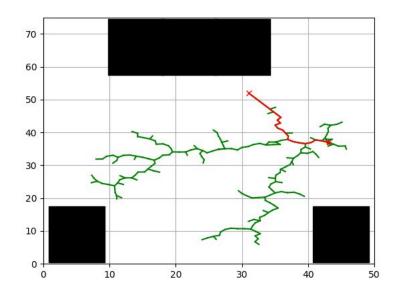


Fig 13. A robust trajectories to the goal state from arbitrary initial states

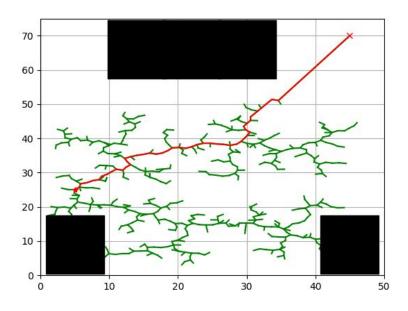


Fig 13. Improved version using RRT*