

This project was to make set an alarm that would publish the state of the robot in the case that something obstructed the robot from moving. Before the alarm was installed the robot would hit a wall and stop moving. Then an alarm was set that would look directly in front of the robot. This was still insufficient because the robot would hit something on the side at an angle and this would prevent it from moving, but the alarm would not sound. This required the alarm sensor to be spread over an area instead of a single point. This was done by iterating over a range of pings then checking those ranges on execution. The robot would hit a wall and the reactive commander would then rotate the robot in a different direction then attempt to move again and continue to rotate till this happened.