Week 2 - Ultrasonic Sensing

An autonomous robot needs to acquire knowledge about its environment. This is done by taking measurements using sensors and then extracting information from those measurements.

There is a wide variety of sensors in mobile robots. In this week we present a very popular type of sensor, ultrasonic devices, which are used for measuring distances to solid obstacles.

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We will explain how ultrasonic sensors can be used for simple navigation tasks, including wandering while avoiding obstacles, and wall following.

- Ultrasonic Sensors (Ultrasonic%20Sensors.ipynb)
- Detecting Obstacles (Detecting%20Obstacles.ipynb)
- Searching for Free Space (Searching%20Space.ipynb)
- Wandering (Wandering.ipynb)
- Wall Following (Wall%20Following.ipynb)

For more comprehensive information about sensors used on mobile robots, refer to H.R. Everett's book *Sensors for Mobile Robots: Theory and Application* (http://barteverett.com/book.html).

Try-a-Bot: an open source guide for robot programming

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