

Intro to Robotics

Quiz B

1) Describe how you would structure a program to control two additional motors (a teeny platform on top of your 3Pi) which allows ultrasound sensors elevation and azimuth control. It must operate while the 3Pi is moving.

2) You need to turn a hair dryer on and off using your 3Pi. What hardware would you use to do this? A quick sketch.

3) You have a computer that outputs an analog voltage ($0 - 5\text{V}$) on one of its pins. Its output impedance is $10\text{k}\ \Omega$. Can you drive a device with an input impedance of $1\text{k}\ \Omega$? If not, why. Calculate the peak voltage into the target device.