## TROUBLESHOOTING

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There are troubleshooting sections in the sample answers

#### PYTHONPATH

- Path errors: ModuleNotFoundError: (check spelling for imports, but otherwise you have set up problem).
- This is how Python finds the modules to import
- On the robot set at the Command Line
  - export PYTHONPATH=/home/pi/robohat

## PYTHONPATH: SIMULATOR

• PYTHONPATH should include the folder where the simulator is installed.

# STUDENT PROGRAMS

- PYTHONPATH also needs to point to wherever students store their programs.
- If they each have their own simulator/robot then this can be the simulator/robohat folder.
- Otherwise you are going to need to think about what instructions to give them - clear out old programs regularly.

#### THE ROBOTS

- Power: The robots eat batteries. The most common cause of them just shutting down or the motors stopping working is power.
  - I recommend using a USB power bank as back-up power for the Raspberry Pi.
  - Use Eneloop Pro Rechargeable batteries (particularly for the Initio).

# ROBOT DOESN'T MOVE (BUT NO ERRORS)

- May be a power issue.
- If you are working from a file (not the command line) it may be that the command didn't have time to execute (check using the command line).

#### PYTHON SIMULATOR

- · Check you are in the right IDLE window.
- (On Macs) sometimes crashes with a memory error. Everything is programmed so that if you just restart and re-open the world everything should connect properly.
- Can be a bit laggy.

#### FAILING TO INITIALISE

```
>>> initio.forward(10);
Traceback (most recent call last):
   File "<pyshell#1>", line 1, in <module>
        initio.forward(10);
   File "/Users/louisedennis/PiRovers/pirover_simulator/simclient/simrobot.py", line
113, in forward
```

Similar errors can arise if you've called cleanup() and carried on working

## FOR MORE HELP: THIS IS ME

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