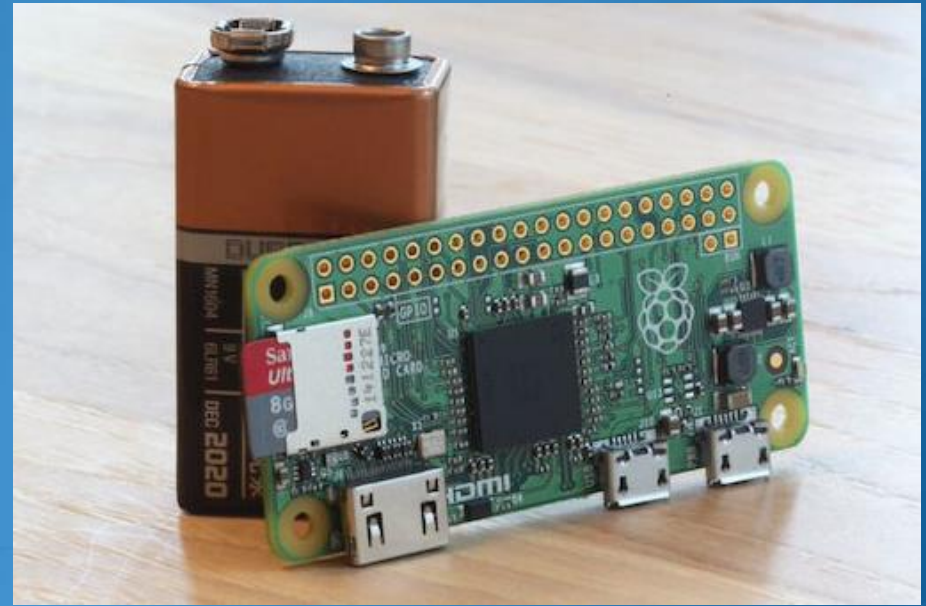
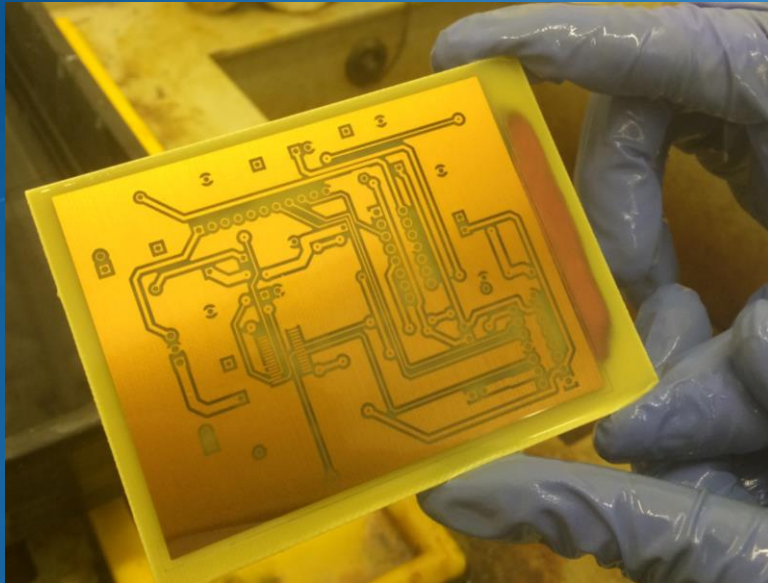


# RaPiROV

A University branded Underwater Remotely Operated Vehicle for education

## Objectives

- Capable of operating in fresh water at modest depths (swimming pool)
- Attractive and easily programmable software side
- LOW COST!



## Hardware

- 2 Forward + 1 Depth Propellers
- Tethered to a Raspberry Pi on the surface
- Laser cut PVC/Polycarbonate frame kit
- Custom motor driver circuitry
- WiFi connection for control

Pier Maria Biagiolini  
UG Ship Science  
Supervisor: Dr. S. Boyd

# RaPiROV

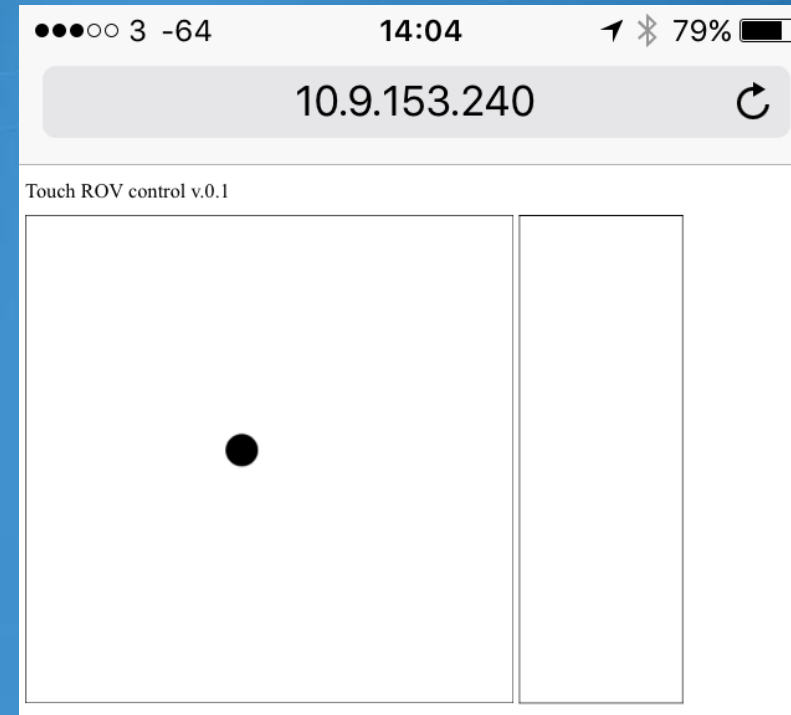
A University branded Underwater Remotely Operated Vehicle for education

## Software

- Touch screen or keyboard control
- Python Webserver on RasPi hosting the front webpage and performing GPIO control
- Automated email with local IP address sent to pre-defined address

## Future Work

- Final design and construction of a working ROV prototype
- Hosting a WiFi Access Point on RasPi
- Support for underwater camera and/or tools (e.g magnet for coins)
- Booklet to come with the kit to support teaching and assembly



Pier Maria Biagiolini  
UG Ship Science  
Supervisor: Dr. S. Boyd