

Backpackable Robot Boat for Sonar Surveys  
Outline Project Specification  
CS39440

Elizabeth Stone (eas12)  
FH56 Space Science and Robotics

Supervisor: Mark Neal (mjn)

Revision 0.1 - Draft  
February 8, 2017

## **Project Description**

"We have a number of low-cost "backpackable" polystyrene boats that are propelled by propellor and on-board batteries. One of these was used in Scotland with a radio-control system to look for submerged logs in upland lochs (see <http://geophysicistatlarge.blogspot.co.uk/search/label/dendrochronology>)?. This project aims to produce a more sophisticated on-board control system that can autonomously drive the boat around bodies of water collecting sonar data. The onboard system will require something like a RaspberryPi and sensors such as GPS and compass and the ability to control rudder servos and motors. Part of the project will be to develop a detailed specification and to select appropriate technologies (in consultation with me). Significant help will be available for the electronics and hardware parts of the project." blah blah?

## **Proposed Tasks**

## **Deliverables**