Qualifications:

Darrel Deo is our team leader. He will also be working on integrating the sensors, and building the tripod, which will be used to locate the GPS coordinate of the drowning victim. Darrel is extremely qualified for this position because of his work at MIT. While at MIT Darrel worked with Robotics, Vision, Sensor Networks laboratory. Where he worked on an assistive device for the visually impaired. This experience allowed for him to experience different sensors, and interface with them.

Shehadeh Dajani is managing our budget. He will also be leading our Printed Circuit Board (PCB) design and layout, along with our vehicle design. Shehadeh is qualified for these positions because he is the only one who is has taken the course on PCB design. Shehadeh has also had previous experience with ROVs, at the University of Maryland. We will put this previous work to use in the design of our Autonomous Lifeguard.

John Ash is managing our schedule for the project. He will also be working on the wireless protocols, water proofing, and will be laying out the PCB. John is qualified for these positions because of his previous experience with point-to-point communications. His experience with the autonomous boat on campus in the Autonomous Systems Lab (ASL) makes him an excellent consultant for protecting our hardware from water.

David Goodman is our document administrator. He will also be working on the State Machine of our robot, and the GPSs. David is more than qualified for this position, because he has five years of software engineering experience in industry. This means that he will be able to easily help us design and debug our software and code. He has also worked in the Autonomous Systems Lab (ASL) on an autonomous solar boat project, as well as with a graduate student on GPS-related research. This means that he has the necessary experience to head the design and implementation of the navigation system for our project.

Benefits:

This project will directly benefit the Santa Cruz community, without taking any jobs from life guards. This system will be easy to implement and will allow life guards to save more people from drowning. More importantly however is that this will be an upgrade to current technology. We have analyzed where ocean safety is headed(Moving Flotation Devices), and have will build the next step to create an autonomous flotation device. With our current budget we should be able to build our boat, cheaper than the current alternatives. Finally the fact that we are currently working in an open source manor means that we will allow for other programmers, hobbyist, and students to interface with our code.