

## Job Summary

Woods Hole Oceanographic Institution is currently searching for a Research Technician to join the Biology Department. This is a regular, full-time, non-exempt position, and is eligible for full benefits.

The successful Research Technician candidate will lead field operations for Dr. Mark Baumgartner's Robots4Whales program ([robots4whales.whoi.edu](http://robots4whales.whoi.edu)), which uses long-endurance autonomous platforms (gliders, buoys, profiling floats) equipped with passive acoustic monitoring instrumentation to transmit whale detection information to shore in near real time for review and dissemination to academic, government, conservation and industry stakeholders. Whale detections from the Robots4Whales system are used on the U.S. east coast to trigger NOAA Slow Zones for Right Whales, on the U.S. west coast to reduce ship strikes of blue, fin and humpback whales as part of the Whale Safe program ([whalesafe.com](http://whalesafe.com)), and in Canada to trigger mandatory restrictions of ship speeds and closure of fishing grounds to protect North Atlantic right whales.

The internal working title for this position is Senior Engineering Assistant I. The final level of the position will be determined commensurate with the selected candidate's level of education and experience.

## Essential Functions

- Prepare and test electronic systems, including instruments and data collection systems, for deployment at sea, and refurbish these same systems when they return from sea
- Prepare, ballast and test Slocum gliders
- Assist in the construction and testing of moored buoys
- Participate in and/or lead the deployment and recovery of autonomous platforms, including gliders, buoys and profiling floats
- Troubleshoot problems with instruments and autonomous platforms
- Offload data from instruments and gliders, and archive, process and share data with collaborators
- Develop and maintain schedule to manage tasks associated with refurbishing, preparing, testing, deploying, operating and recovering autonomous platforms
- Develop and maintain asset management system to keep track of instruments and equipment
- Maintain and potentially enhance [robots4whales.whoi.edu](http://robots4whales.whoi.edu) website
- Conduct occasional passive acoustic data analysis
- Complete administrative tasks associated with vessel chartering, maintaining satellite communication services, and occasional contracting

## NON-ESSENTIAL FUNCTIONS

As deemed necessary by supervisor

### Education & Experience

Master's degree in related field preferred (e.g., oceanography, biology, acoustics, or engineering), or Bachelor's degree in related field plus three years' related experience, or Bachelor's degree in nonrelated field plus five years' related experience. Relevant work experience is highly desirable. The successful candidate should possess these qualities:

- Proficiency in electronics for assembling, testing and troubleshooting electronic systems, including, for example, soldering, building wiring harnesses and using a multimeter
- Ability to work independently
- Ability to work professionally with people from many different disciplines, including scientists, engineers, technicians, manufacturers, and vessel operators
- Willingness to travel and go to sea, sometimes on short notice
- Experience at sea is preferred
- Highly organized
- Proficiency in one or more computer languages is desired
- Proficiency in Windows, Mac and Linux (Unix) operating systems is desired
- Experience with website maintenance and development is desired
- Experience with the analysis of passive acoustic recordings is desired

### Special Requirements

- Sea duty, most often consisting of 1-day trips, but occasionally trips of 5-30 days
- Ability to obtain TWIC card
- Must have a valid driver license
- WHOI is a federal contractor required to comply with Executive Order 14042. As such, WHOI has enacted a Mandated COVID19 vaccination policy effective December 8, 2021 where you must register your vaccination status in order to begin your employment. The registration process entails confidentially submitting a vaccination card and/or your vaccination status or requesting to engage in the interactive exemption process for either a medical or religious reason.

### Physical Requirements

Physical duties for this position include but are not limited to, ability to lift/carry up to 40 lbs as well as reaching above and below the shoulders, stooping/kneeling, and climbing ladders/stools. Must have the ability to use hands for basic grasping/manipulation as well as fine manipulation. Visual abilities to include near, far, peripheral, depth perception, and ability

to distinguish basic colors. Hearing requirements include the ability to hear and respond to instructions, communicate effectively in loud areas (pier/dock, warehouse), talk and travel. Other physical tasks include occasional prolonged standing/walking; use of hands for basic/fine grasping and manipulation, repetitive motion, reaching above and below the shoulders, pushing, pulling, kneeling, bending, twisting, and stooping. Other occupational requirements include talking, traveling, working around others, and with others in a lab setting and at sea, as well as alone. Will be exposed to dust or other irritants and electrical/mechanical/power equipment hazards. Physical duties are subject to change.

### Sea Duty

May work at least 8 hours per day and, at times in excess of 12 hours per day, 7 days per week. Sleep and work hours can deviate from those on land. May be expected to work on watch schedule (such as 8 hours on and 8 hours off or 12 hours on and 8 hours off) for all or part of a cruise or to work as hours are needed to accomplish the planned work. May need to travel during holidays and for long distances to and from foreign ports. May experience rudimentary living and working conditions, with shared and basic living quarters and laboratories. May experience bad or extreme weather conditions, including heavy seas, winter weather or hot, tropical weather. Work on deck may occur in both hot and cold conditions around the clock. Sea conditions will lead to active ship motion. Should be able to climb steep and vertical ladders and able to enter and exit compartments through hatches, doors, and sills. Should be able to carry heavy gear and participate in the loading and unloading of the ship as well as in the activities on deck and in the labs during the cruise. Shipboard environment may include: confined areas, shared sleeping quarters (berths) and bathroom facilities, small and basic berthing, fixed meal times and basic menus. Modest levels of heating, cooling, ventilation, and illumination, limited or no email and internet access and limited off-duty and recreational facilities (library, lounge, movies). May be exposed to potential allergens and irritants, including paint fumes. May experience constant and intermittent loud noises, and slippery and uneven surfaces.