

Join scientific, commercial,
and defense developers in
creating the next generation of
autonomous ocean systems.

BECOME A MEMBER

of the Center for Marine Robotics.

Research and development

Creating new concepts, breaking old
boundaries, finding unexpected applications

Problem solving

Building more capable robotic
systems and enabling more efficient
human-robotic interaction

Collaboration

Bringing together current and future
leaders in marine robotics

www.whoi.edu/marinerobotics

Academic Partners

Johns Hopkins University
Laboratory for Computational Sensing and Robotics
Georgia Tech Research Institute
MIT Computer Science and Artificial Intelligence Laboratory
Carnegie Mellon University Robotics Institute
University of Rhode Island Ocean Exploration Trust
Draper Laboratory

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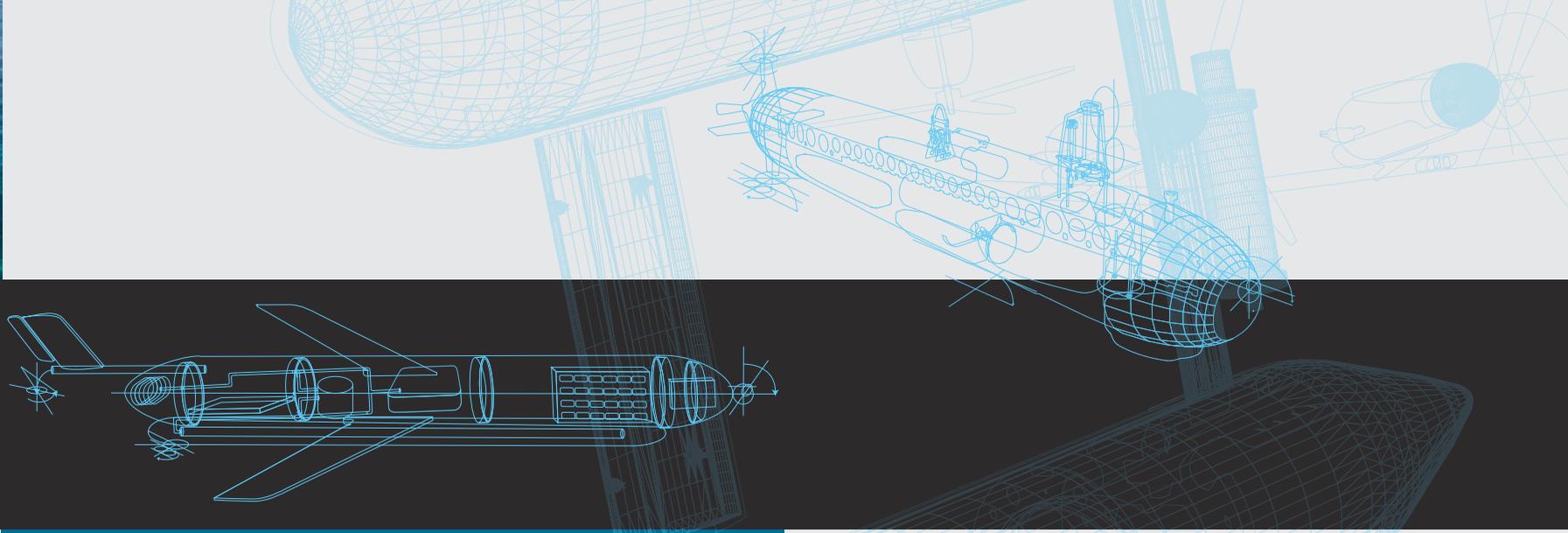
Center FOR Marine Robotics

Woods Hole Oceanographic Institution

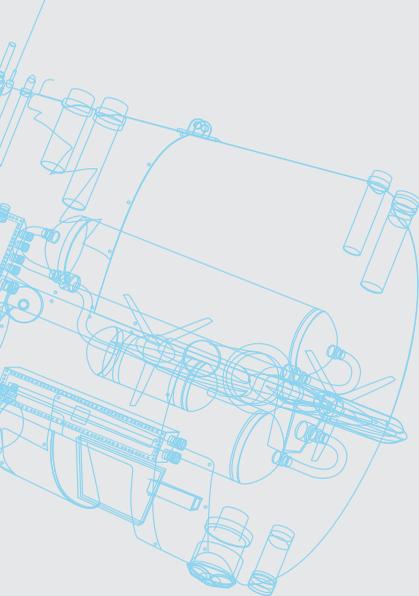
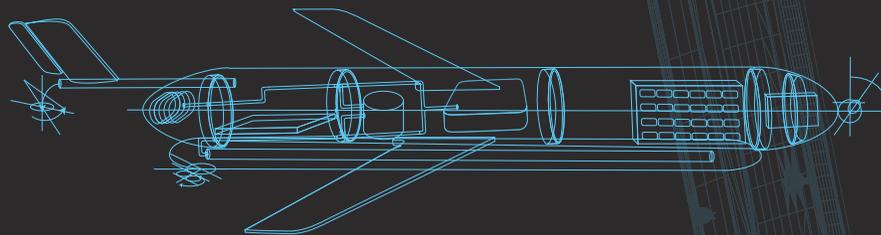


MEMBERSHIP OPPORTUNITIES





Revolutionizing human-machine interaction in the marine environment



Robotic systems promise to open the ocean to humans in new ways. Recent advances are already creating new opportunities by improving efficiency, lowering costs, and reducing the risks of marine operations.

The Center for Marine Robotics (CMR) at the Woods Hole Oceanographic Institution was created to foster collaborations with industry members, academic partners, and key government agencies in order to change the way people and machines work together to surmount the unique challenges presented by the marine environment.

Membership benefits

Members will have unique access to experts and resources devoted to creating breakthroughs in autonomous systems.

- » Invitation to CMR's two-day, members-only annual meeting with WHOI's leading technologists and scientist
- » Representation on the CMR Members Committee to provide input on industry needs, research activities, CMR direction, and the creation of sector-specific consortia
- » Access to CMR research staff, including formal and informal lab visits, tours, demos, and meetings with staff and students
- » Visibility on the CMR website

A legacy of innovation

The scientists and engineers at the Woods Hole Oceanographic Institution have helped shape marine research and engineering for more than 80 years. Today, the Institution sits at the center of a growing marine robotics innovation hub in New England and is a recognized global leader in the research, development, and operation of robotic systems with a wide range of applications:

- » Long-duration, deep-ocean survey and sampling of marine chemistry, geology, and biology
- » Deep- and shallow-water forensic investigations
- » Harbor and coastal infrastructure security
- » Environmental baselines and incident response and monitoring
- » Routine access to deep-water, under-ice, and coastal environments

Areas of research

- » Untethered ROVs for intervention and sampling
- » Long-range, unattended AUV and glider surveys
- » ROV and AUV operations under ice
- » Near-bottom gravity measurements via AUVs
- » Co-robotics, scalable autonomy, and adaptive sampling
- » Advanced materials for deep-submergence operations
- » Underwater acoustic/optical communications and data connectivity
- » Navigation, localization, and state estimation in complex environments
- » In-situ acoustic and chemical assessment of hydrocarbon leaks and seeps
- » Networked systems of heterogeneous vehicles and distributed sensors

