



RoboSub 2023

Optional Community & Outreach Submission

School/Organization Name: Indian Institute of Technology Bombay

Team Name: AUV-IITB

Generic Team E-mail: auviitb@gmail.com

Submission Date: June 16, 2023

Community & Outreach Submission

A key objective of the RoboSub program is to strengthen and enhance the community. Teams are encouraged to participate in educational outreach activities and describe those activities here. Maximum 500 words

Community & Outreach Description:

Underwater exploration is an exciting field, and we at AUV-IITB are determined to push the boundaries of underwater exploration. Our flagship vehicle, Matsya, is a testament to our dedication to engineering excellence, collaborative teamwork, and visionary thinking.

One of the milestones for the team was the Tech & RnD Expo'22 at IIT Bombay, where Matsya 6 (TRL 7) was showcased to students, eminent professors, journalists, and business executives. The team's cooperative effort, and organization, were appreciated by attendees, and it was an excellent opportunity to showcase the team's technical prowess.

The team also had the honor of exhibiting our vehicle Matsya 4 at InvenTiv R&D Expo organized by IIT Delhi on October 14 and 15, 2022. Of the 75 projects chosen to display their innovative technology, team AUV-IITB was the youngest, consisting solely of undergraduate students in a room full of Ph.D. candidates and professors. Our team presented Matsya's capabilities to industry experts from various domains such as Mahindra, IBM, and Daimler, as well as captains from the Indian Navy. The esteemed audience deeply valued the team's synergy, meticulous planning, and seamless knowledge dissemination, recognizing them as significant strengths.

We helped Professor Rajesh Zele in his initiative, the WiSE program at IIT Bombay, which aimed to inspire girls from rural parts of India to pursue STEM. Our team developed a DIY kit to build a remote-controlled rover bot for the participants. This was our attempt to give back to the community and inspire young girls to pursue careers in (STEM).

A remarkable community engagement by AUV-IITB was our participation in Ek Bharat Shreshtha Bharat, where we welcomed a group of young students from Punjab and introduced them to the wonders of an AUV. From tourism to traditions, development to technology, and fostering people-to-people connections, this exposure tour had it all. AUV-IITB is grateful for the opportunity to inspire and build empathy among our youth.

Our team is also committed to inspiring the next generation of innovators and technologists. We welcomed schoolchildren for a 2-hour session, introducing them to AUVs, and attending to their various questions. The mechanical subdivision conducted an activity where children made a gripper and were shown a live demonstration of Matsya 4.

With our dedication, teamwork, and innovation, we are determined to achieve new heights in underwater exploration and inspire the next generation of technologists to follow in our footsteps.

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