

Underwater Mobile Robotics / Software Co-op

We are looking for extraordinary software, electrical engineers, and roboticists to help commercialize robotic technology from a premier robotics research lab - the Harvard Microrobotics Lab. We are actively developing robots that address extreme inefficiencies in all marine vessels: biofouling. Biofouling - the growth of organisms such as barnacles and algae on the bottom of ship hulls - contributes to unnecessary greenhouse gas emissions, allows the transportation of invasive marine species, and slows global maritime traffic down by increasing drag on the ship by more than 50%. The robots we are developing can actively prevent biofouling and keep ships in top-performing condition.

Ideal candidates have experience or interest in developing path planning algorithms, combining sensor data to reconstruct underwater ship hull topologies, and testing and implementing low-cost sensors to gather data such as ship hull thickness, coating roughness, and fouling levels. Candidates should have a clear understanding of how to test novel robotic platforms. Candidates with experience in underwater robotics are ideal, however, our robotic platform is more similar to a vacuum cleaning robot than an AUV (Autonomous Underwater Vehicle). Candidates with experience in robotic competitions such as FIRST Robotics, VEX, Battlebots, design/build/fly, or similar are highly encouraged to apply.

Terms Available

Summer Term 2023 - May/June to August (3-4 months)

We prefer 6-month or longer internship/co-op terms but will consider exceptional candidates for 4-month or summer periods.

Required Skills:

- Experience with robotics and robotic navigation
- Experience with electronics and sensor integration
- Coding languages such as Python, C++, Matlab
- Excited to be developing a novel robotic platform

Contact

Email resume to Dr. Michael Bell - bell@bluetechrobotics.com