



Underwater robotics

REASEARCH FIELD

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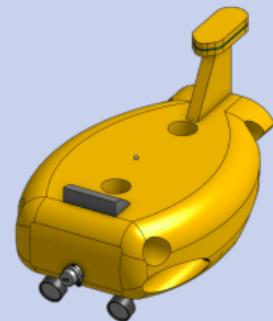
April of 2022

Sistema FIEB



Introduction

Field of research focused on studies in **underwater robotics**, aspects of computational dynamics, applications of basic functionalities of a robotic and search and analyze technology trends of this field.



Goal

The training of researchers in underwater robotics

Motivation

AUVs and ROVs are playing a important role in **oil & gas exploration**, military and other areas. Many important companies are demanding invest in this area.

"AUV and ROV Market to reach \$7.2 billion by 2026" [[MarketReport2022](#)].

Main Tools

In this Field of **Reasearch** and **developoments** there are great tools that can be used.
On the **research spectrum**



CmapTools



Scopus



Main Tools

On the **development research spectrum**

ROS

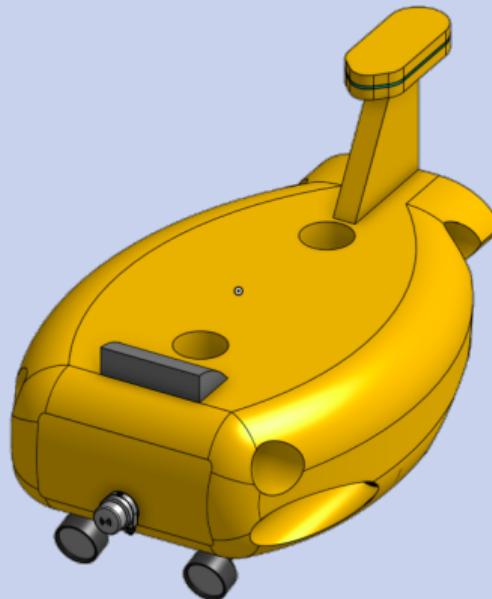


OpenVFOAM®

Projects

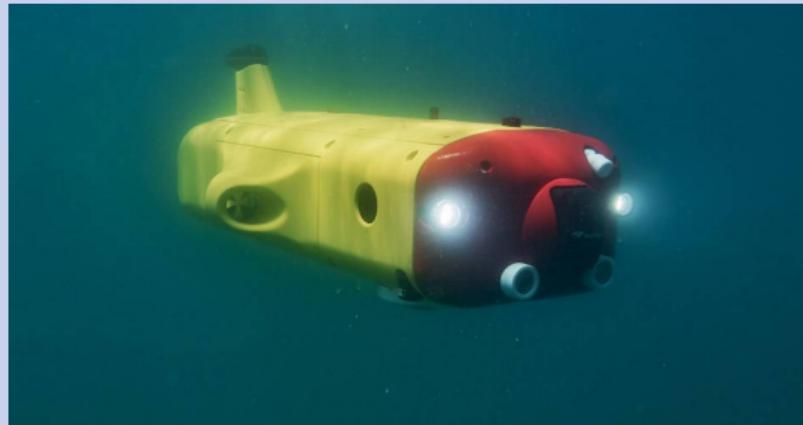
turBOT

The goal is to develop a short size AUV to operate in shallow waters.



FlatFish@ROS

This project is aimed to bring all stuff of FlatFISH to work on ROS



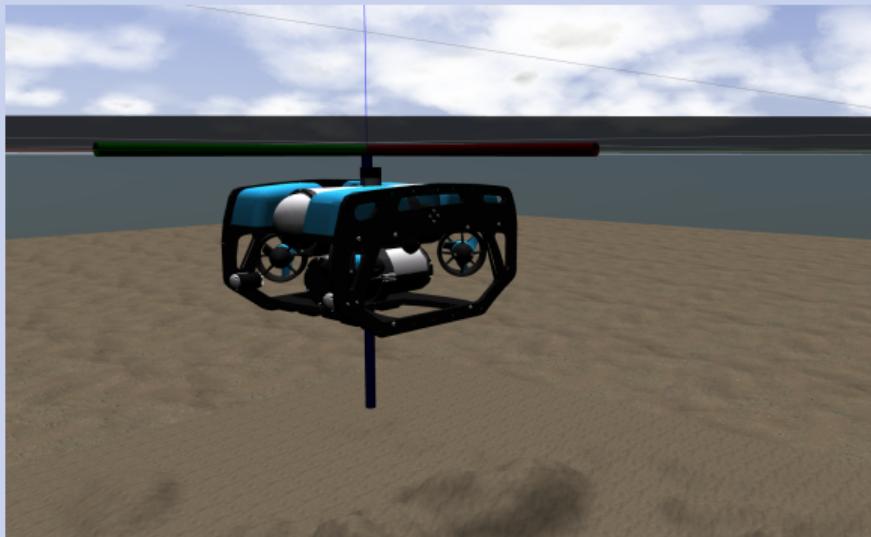
Pirabots

The goal is to test functionalities on ROVs: BlueROV and BirROV.



Challenges

Pipeline identification - Solo
Pipeline Following - In Group



Members

The members of the line of research are:



Marco Reis



Alexandre Adonai



Matheus Anselmo



Tâmara Lins

References (1)

[Market Report 2022]

MARKET REPORT. **Global Industrial Monitoring Relays Market 2022-2026.** 2022. Disponível em: [//www.reportlinker.com/p05273085/Global – Industrial – Monitoring – Relays – Market.html](http://www.reportlinker.com/p05273085/Global – Industrial – Monitoring – Relays – Market.html).



Questions?

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