



DECK
Marine Systems

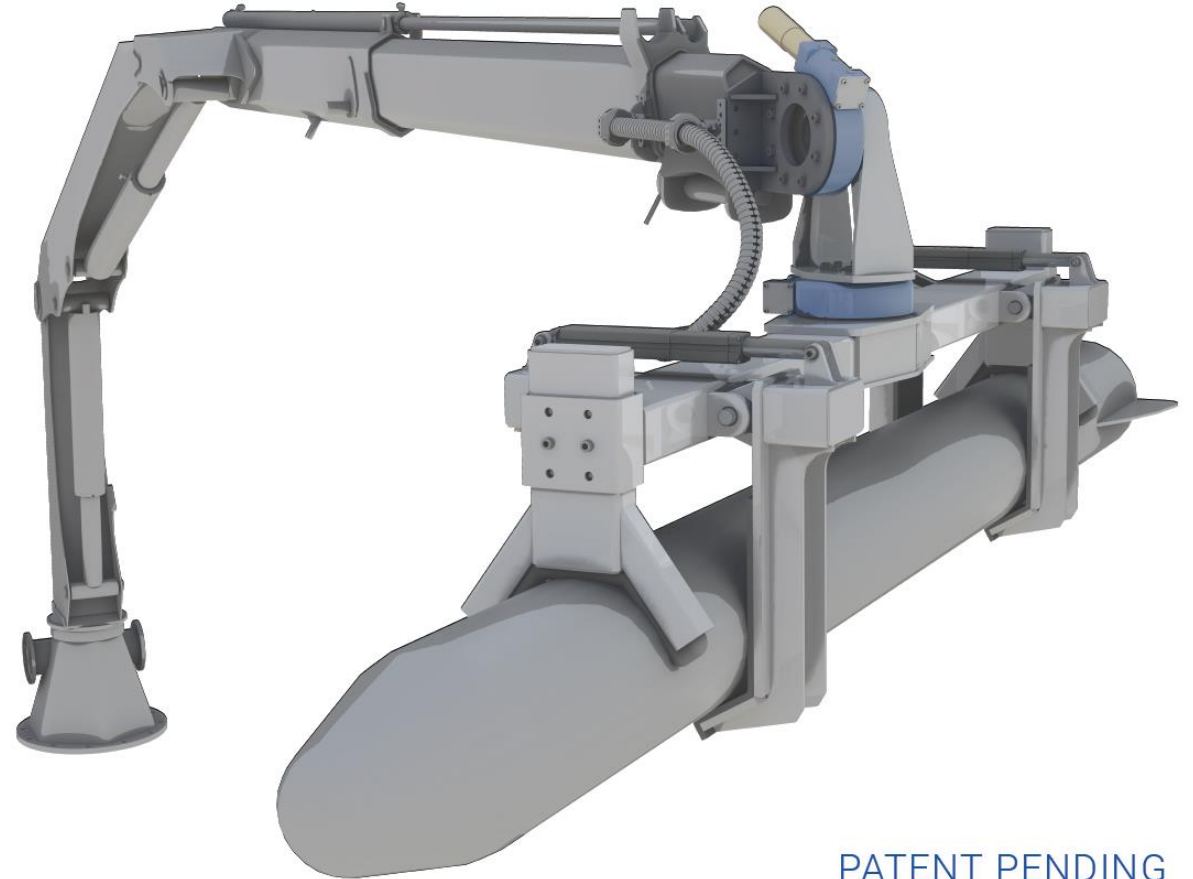
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Autonomous Ai-aided Launch and Recovery Technology for capturing unwired AUV and UUV

COMBINED NAVAL EVENT 2023

Farnborough, UK

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PATENT PENDING



Who we are?





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The problem we solve

- ✓ Safety
- ✓ Operations
- ✓ Autonomy





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Our solution

- AI-based autonomous or piloted operations
- 3D object recognition and real time tracking
- Day & Night vision modes through the air & water
- Hybrid active heave compensation (HAHC)
- Low-magnetic design and tension control

Provisional patent nr. US 63/344,325

International patent PCT/EP2023/063639



Process overview 1/2

Scenario 1

AUV approach camera coverage area

AUV minimizes the speed

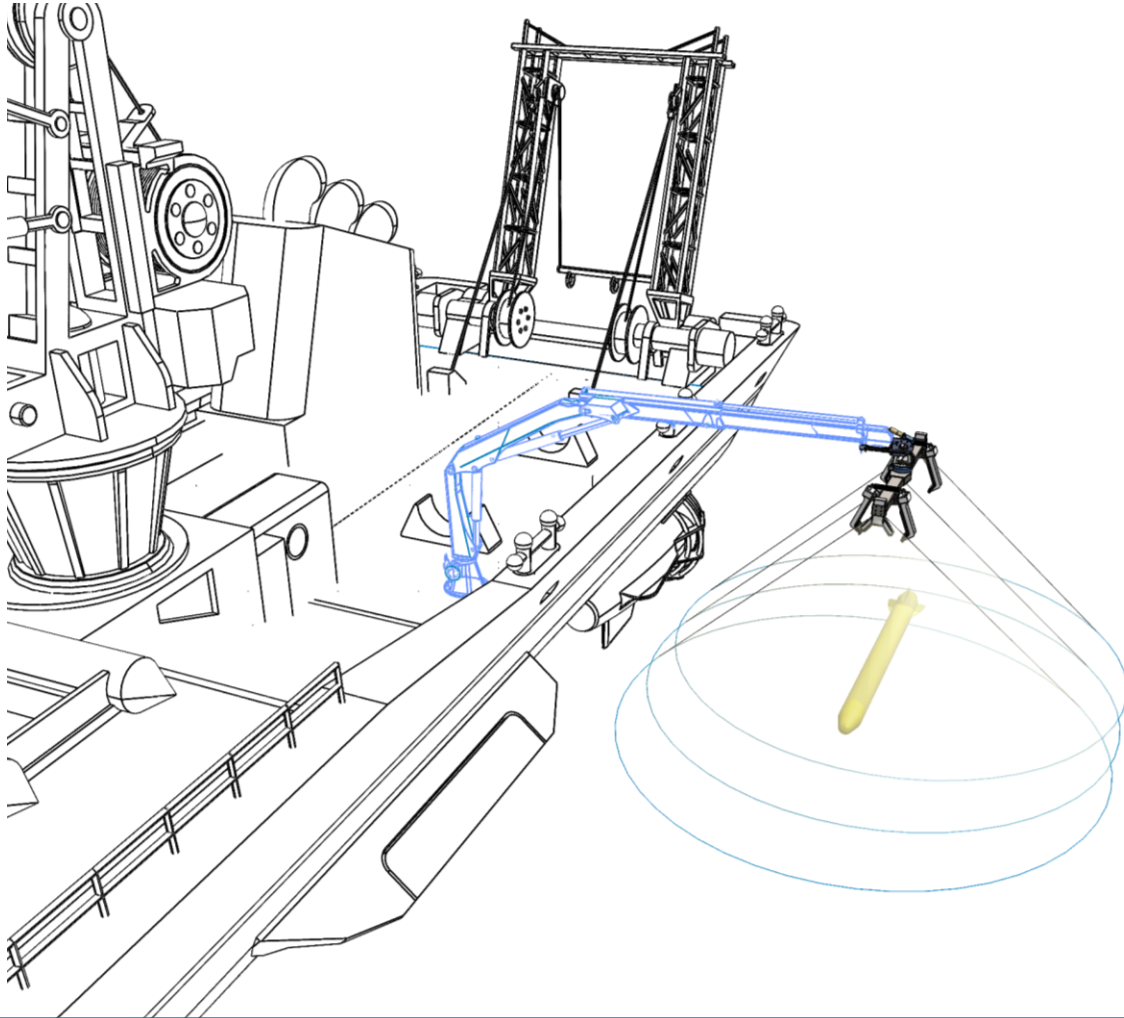
Vision system recognizes AUV and start tracking

Gripper moves as close as possible to AUV

AI compensates motions of AUV and platform

AUV picked up in 1 or 2 wave cycles

AUV is moved to a storage position

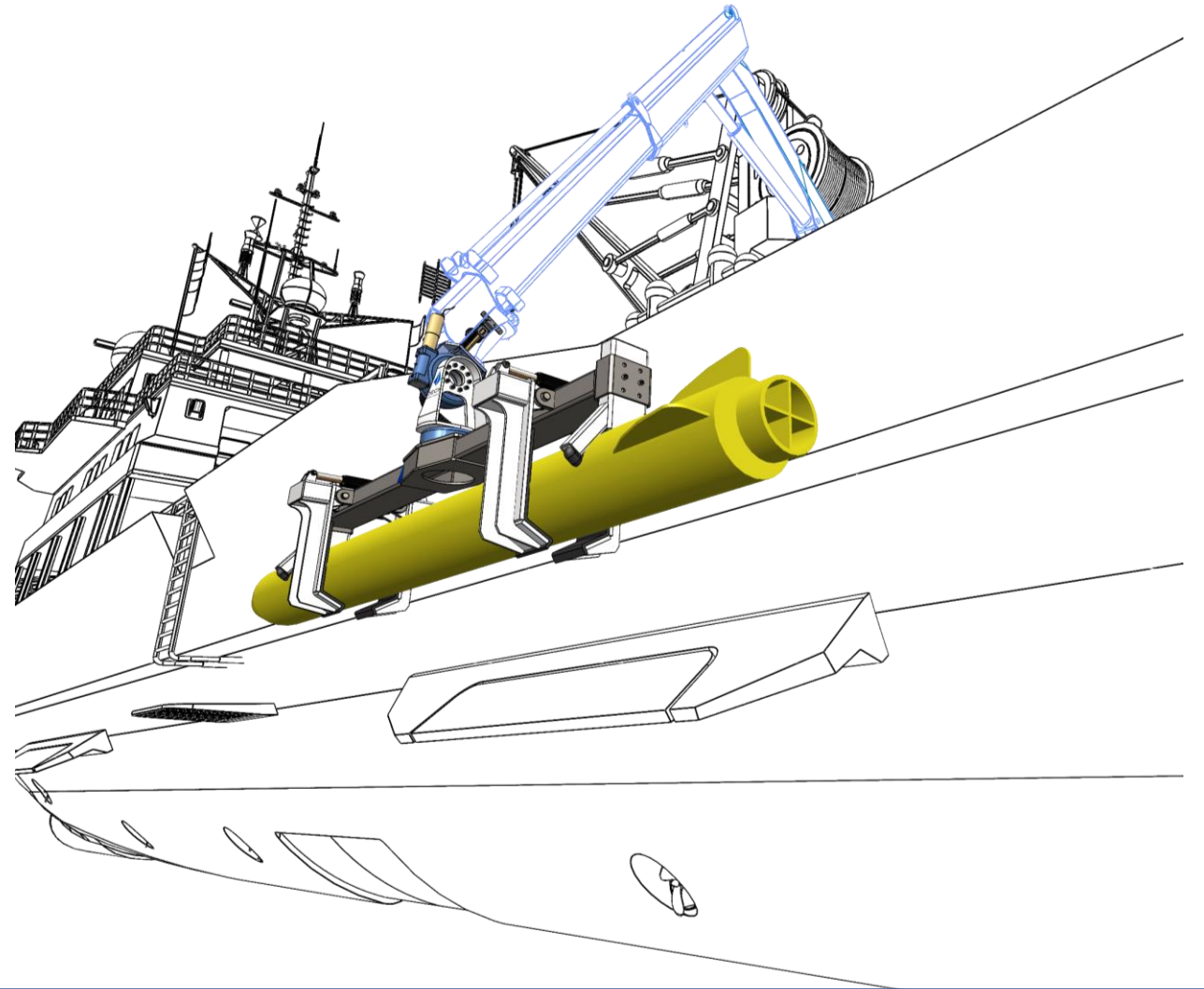


Scenario 2

If AUV is “dead”

Then platform must be positioned

And steps from scenario 1 to be repeated





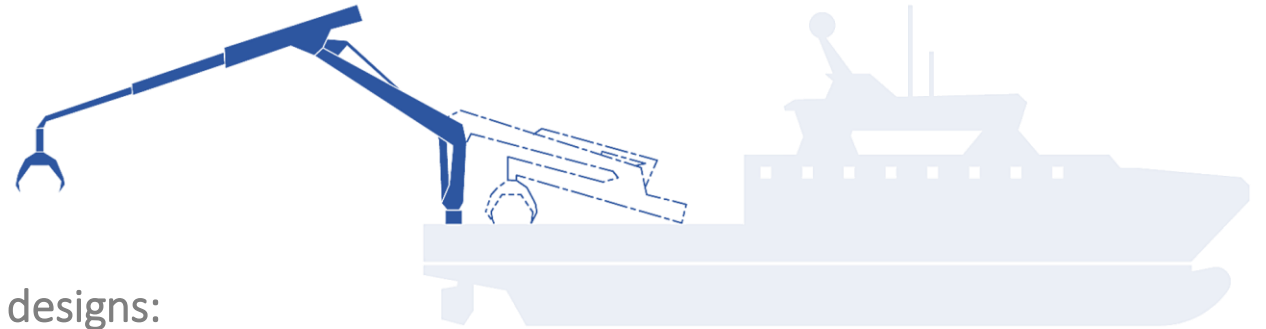
Advantages

Our AI-based solution can be used with variety of vessel designs:

- All-In-One technology
- Deck, Stern, Hangar or A-Frame installation
- Fully autonomous capability
- Scalable, suitable for ships from 9m LOA to 100+m LOA
- Independent, requires minimum interactions with AUV
- Can be used for newbuild and retrofit projects

Can have much wider application in maritime industry, for example:

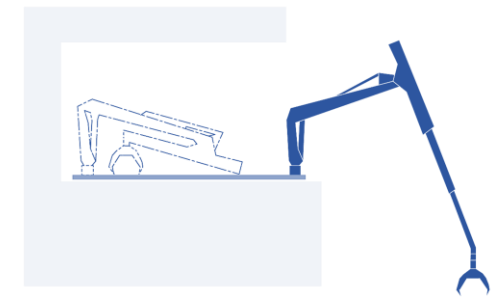
- Picking up wide targets range (submarine rescue, training torpedoes)
- Used as core technology in complex offshore operations, where real-time data processing is required
- Suitable for ship to ship applications



Open deck, stern, port or starboard installation



A-Frame installation



Hangar installation



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What next

Where we are today and what's next

- ✓ Semi-automatic electro-hydraulic is ready to be delivered
- ✓ Fully automatic and Autonomous will be ready in 1 year

Cooperation opportunities

- ✓ Partners to test the pilot in the real conditions - ship / platform + AUV



Thank you!

Any enquiries:

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