# Article information:

Cooperative USV-UAV marine search and rescue with visual navigation and reinforcement learning-based control - ScienceDirect  
<https://eproxy.lib.tsinghua.edu.cn/https/7myu6CroLAXMrp7uaqvXiuvMGPPiXeQ7HH6xJD9b0MhzQe/science/article/pii/S0019057823000071>

# Article summary:

1. This paper investigates the use of a cooperative USV-UAV system for marine search and rescue, with visual navigation and reinforcement learning-based control.

2. A deep learning-based visual detection architecture is developed to extract positional information from UAV images.

3. A reinforcement learning-based USV control strategy is proposed, which can learn a motion control policy with an enhanced ability to reject wave disturbances.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article is generally reliable and trustworthy in its presentation of the research conducted on the use of a cooperative USV-UAV system for marine search and rescue, with visual navigation and reinforcement learning-based control. The authors provide detailed descriptions of their methods and results, as well as citing relevant sources to support their claims. The article does not appear to be biased or one-sided in its reporting, nor does it contain any promotional content or partiality towards any particular viewpoint. All possible risks associated with the research are noted, and both sides of the argument are presented equally. There are no unsupported claims or missing points of consideration in the article, nor is there any evidence that suggests that counterarguments have been unexplored or ignored. In conclusion, this article appears to be reliable and trustworthy in its presentation of research findings on cooperative USV-UAV systems for marine search and rescue.

# Topics for further research:

* Marine search and rescue technology
* Autonomous underwater vehicles
* Unmanned aerial vehicles
* Visual navigation systems
* Reinforcement learning-based control
* Cooperative USV-UAV systems

# Report location:

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