WARA-PS 2023 Project — Multi-Vessel Control for Unmanned Surface Vessels

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Abstract

This project looks at the foundations of maritime swarm management, with the goal of developing an architecture that allows for maritime vessels to behave autonomously whilst contributing to a larger goal. Two methods of controller are explored, being the centralised and decentralised approaches. Simulation results demonstrate that both methods of controller are suitable for fleet operations, but with limited hardware experimentation, more testing is required before any sort of real world deployment can be done.

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