

THE USE OF DIGITAL TWINS TO REFINETHE ALGORITHMS OF HYDROACOUSTIC STATIONS

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Hydroacoustic stations based on fast-turning autonomic or ship's hydroacoustic stations in multistatic system or in single operation could resolve wide complex tasks on marine control, detection, tracking, target designation on different threats and intruders - unmanned boats and autonomous uninhabited underwater vehicles. But for effective resolve of this tasks it's needed of complex development and improving of detection algorithms and parts of reciving and transmitting system of hydroacoustic stations, which could be resolved only by using digital twins. This paper consider of using digital twins for development and improving different algorithms and systems of hydroacoustic stations.

Keywords: digital twins, digital signal processing, autonomic hydroacoustic station, marine control, probability of target detection, unmanned boats.

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