Abstract

Thanks to the new technological paradigm of the 21st century, the maritime industry is being transformed and digitized. Augmented reality seems to be a fundamental tool to meet the challenges of digital transformation. This technology has been designed for use in an industrial context to offer its users an augmented perception by making virtual computer-generated entities to coexist spatially and temporally in a real environment.

The objective of this thesis is to evaluate the benefits that augmented reality solutions could bring in the maritime industry and more specifically to the marine engineering and maintenance sector. We therefore sought to analyse how the alliance between digital data and the physical world could assist operators from the training phase to daily interventions in shipyards and on board ships.

In order to answer this question, we analyzed how the implementation of this technology, within different sectors of the industry in general, was beneficial. We then reviewed a number of use cases potentially applicable to marine industry sectors.

Augmented reality is currently being tested in several companies in the maritime industry to evaluate the potential of this technology for large-scale deployment in the near future.