A Machine-Learning Approach to Predict Main Energy Consumption under Realistic Operational Conditions

The paper presents a novel and publicly available set of high-quality sensory data collected from a ferry over a period of two months and overviews existing machine-learning methods for the prediction of main propulsion efficiency. Neural networks are applied on both real-time and predictive settings. Performance results for the real-time models are shown. The presented models were successfully developed in a trim optimisation application onboard a product tanker.

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Contributors: Petersen, J. P., Winther, O., Jacobsen, D. J.
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