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Synthetic Training Data Generation for Visual Object Identification on Load Carriers

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Abstract

With visual AI processes relying on individual and context accurate training data, the existing common object datasets and randomization based synthetic data pipelines can only hardly be transferred or applied on specific and narrow industrial tasks. To enable visual AI applications for intralogistics processes, such as supervision or localization of objects, a domain-knowledge driven implementation for generation of context accurate synthetic training data is introduced. With this consideration of process and domain requirements in the data generation pipeline itself, a data-generator for object identification on load carriers is contributed.

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