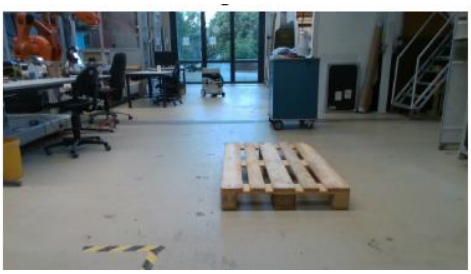
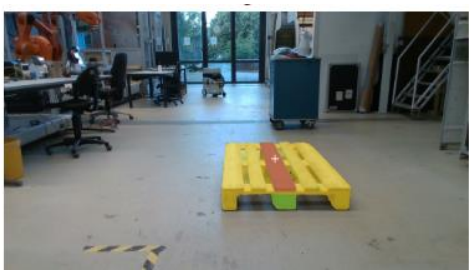


[1]

Research Project or Master's Thesis

at the Institute of Aircraft Production Technology

Image Inpainting for the extraction of humans from multimodal data recordings in aircraft production

Aircraft production, with its low quantities and a large degree of customer-specific requests, is characterized by highly individualized manufacturing. In these demanding manufacturing environments, the introduction of digitized solutions is intended to record the current assembly process and material delivery progress in order to optimize and plan subsequent processes, such as further material delivery.

To set up such a system, a mobile sensor box is being developed at the IFPT that can be used to create a digital representation of the factory. The data of different modalities, for example 2D image data and 3D LiDAR scan data, are merged, stored and then processed and evaluated. With the aid of such a digital twin, statements can then be made about the current production status and changes compared to the previous recordings can be detected.

For the creation of such a digital representation, however, people have to be removed from the data on-premise in order to meet data protection requirements and to reduce the effort for data processing to relevant material, product and assembly equipment.

The task of this work is to develop an approach to extract humans from the recorded data across modalities.

Your tasks

- Literature research and problem analysis
- Implementation, testing and evaluation of a suitable algorithm
- Preparation of the findings for publication

Your profile

- You are interested in computer vision, AI and programming
- Independent & structured way of working

Schedule

- Start: from now on | End date: to be determined

[1] - https://doi.org/10.48550/arXiv.2307.12674

If you are interested, please email your transcript of records to:

Philipp Prünte, M.Sc. | philipp.pruente@tuhh.de

TUHH
Technische Universität Hamburg

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