



Technische Hochschule
Ingolstadt

Fakultät Elektro-
und Informationstechnik

Master's Thesis

„Adapting Simulated Data to Real-World Style Using GAN Methods“

Research Project:

This thesis focuses on the development and application of Generative Adversarial Networks (GANs) to adapt the characteristics of simulated imagery or LiDAR data to match the style of real-world data.

Objective of the Thesis:

- To explore and implement GANs for data style transformation.
- To analyze the effectiveness of GANs in style transfer tasks.
- To evaluate the quality and usability of the transformed data for real-world applications.

Tasks:

- Conduct a literature review on GANs and their application in data transformation.
- Develop a GAN model for style transformation.
- Perform experiments with both simulated and real-world data sets.
- Compare and analyze the outcome of the transformation.

Duration: 6 Months

Location: Institute of Innovative Mobility (IIMo), THI

Workplace: Institute of Innovative Mobility (IIMo), THI

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