

# Automatic Generation and Validation of Simulation Based Digital Twins

## A Data-driven Framework and Case Study Application

---

**Author:** Daniel Fischer

**Supervisor:** Prof. Christian Schwede

**Program:** Research Master Data Science

**Institution:** Hochschule Bielefeld (HSBI)

**Submission Date:** February 18, 2025

# Contents

<b>Glossary</b> . . . . .	<b>3</b>
---------------------------	----------

# Glossary

**computer** is a programmable machine that receives input, stores and manipulates data, and provides output in a useful format 1

**FPS** Frame per Second. 1

**Linux** is a generic term referring to the family of Unix-like computer operating systems that use the Linux kernel. 1

**real number** include both rational numbers, such as 42 and  $\frac{-23}{129}$ , and irrational numbers, such as  $\pi$  and the square root of two; or, a real number can be given by an infinite decimal representation, such as 2.4871773339... where the digits continue in some way; or, the real numbers may be thought of as points on an infinitely long number line. 1

Waswani et al., 2017

# Bibliography

Waswani, A., Shazeer, N., Parmar, N., Uszkoreit, J., Jones, L., Gomez, A., Kaiser, L., & Polosukhin, I. (2017). Attention is all you need. *NIPS*.