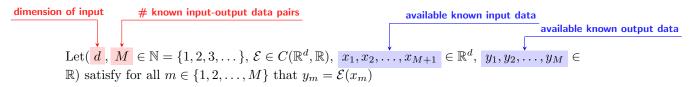
Deep Learning

September 3, 2024

1 Introduction

1.1 Formulation



With $\mathcal{E}: \mathbb{R}^d \to \mathbb{R}$, unknown function which relates input and output

1.2 Goal

The Learning Problem goal is to use the knowledge of M input-output data:

$$\begin{array}{c|c} \textbf{Pair 1 (not using } \mathcal{E}) & \textbf{Pair 2 (not using } \mathcal{E}) \\ \hline & & & \\ \hline & &$$

References

[1] Arnulf Jentzen, Benno Kuckuck, Philippe von Wurstemberger. (2023). Mathematical Introduction to Deep Learning: Methods, Implementations, and Theory https://arxiv.org/abs/2310.20360