

1 Deep Learning Theory

The following section covers the most important background theory for the experiments in Section ???. This includes an introduction to various types of neural networks, as well as an introduction to the optimization of such networks.

1.1 Feedforward Neural Networks

-

1.2 Convolutional Neural Networks

1.3 Recurrent Neural Networks

1.3.1 Long Short-Term Memory Unit

1.3.2 Gated Recurrent Unit

1.4 Transformer

1.5 Training a Neural Network