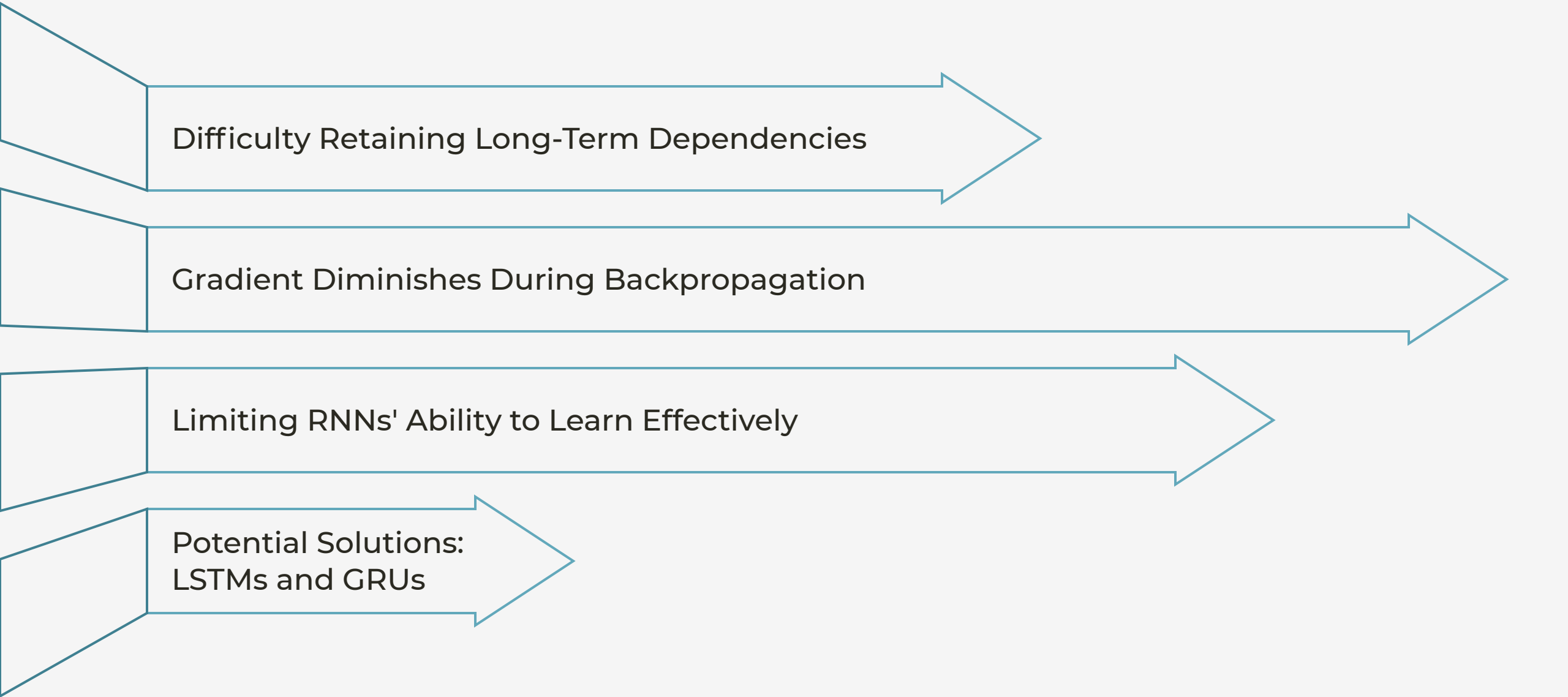


# The Vanishing Gradient Problem



The diagram illustrates the Vanishing Gradient Problem using four horizontal arrows of varying lengths, all pointing to the right. Each arrow is light blue with a darker blue outline. The arrows are stacked vertically, with their left ends aligned to a common vertical line on the left. The lengths of the arrows decrease from top to bottom. The text is centered within each arrow.

Difficulty Retaining Long-Term Dependencies

Gradient Diminishes During Backpropagation

Limiting RNNs' Ability to Learn Effectively

Potential Solutions:  
LSTMs and GRUs