Introduction:

Neural networks are a common machine learning algorithm with real life applications. While they are often implemented in software, their nature allows for massively parallel implementations in hardware. The goal of our project is to improve on hardware implementations and observing how we can increase speed and accuracy and what the tradeoffs involved in both are.

Design Strategy:

Our strategy in designing the neural network is to attempt to emphasize both the speed and size of the network while maximizing accuracy. To do so we will create several versions of the network, with varying numbers of hidden nodes and different activation functions.