# Neural network

In our game, we use a neural network to decide whether or not you catch the killer. The input for the network is a Boolean array with length nine. These Booleans represent pieces of evidence. The network consist of nine input neurons, ten hidden neurons and two output neurons, the two possible outcomes of the game. The network was trained in MatLab and the weights and thresholds were exported to Unity.

The training set was a set of 93 (19 percent of the total possible inputs) inputs with an output. This set was randomly divided in a training set and a test set. If the training set had 95% correct, it goes to the test set. If that was 100% correct, the network is considered trained. If that condition is not met, the network starts all over again with randomly dividing the sets.

# Blender rigging

Our character walks through the scenes with a walking animation. This character and the animation were created with blender. We first created a person in blender and tried to rig it. But the rigging failed, because the self-made model was too messy. To solve this, we used a human model from blendswap.com. Next we put clothes on the model and removed the skin from underneath the clothing. This was done because otherwise his arm would go through his shirt when he moved. The rigging was done with the rigify add-on in blender. With that rig, we made the walking animation that can be seen in the game.