Notes on ANN for presentation

- We want to find make an artificial neural network that can play the game at a high level.
- Neural network that would work for our case:
    - Four input nodes, the observations
    - Four hidden layer nodes
    - One output node, 0 or 1
- Look closer at one node in the hidden layer
- For every node, activation
    - 0 or 1
    - Between 0 and 1
    - 0 to positive infinity
    - Etc.
- Activation decided by:
    - Nodes in previous layer
    - Weights
    - Bias
    - Activation function
- Weights
    - How much previosu layer node influcences node
- Bias
    - How high value before activation
- Activation function
    - Convert number to useful value
- Activation functions
    - ReLU / rectifier
    - Logistic / Sigmoid
    - Hyperbolic Tanget
    - SoftPlus
- Our network
    - Started with 4 hidden nodes
    - Testing showed single node hidden layer was faster
    - Function for hidden layer node
    - Function for output node
- Weights and biases to optimize
    - These are the ones we wish to find
    - The ones that will lead to the correct prediction from the input values
- Activation in out node?
    - 0 – apply force left
    - 1 – apply force right