

# First Neural Network

Putting it all together



Laurence Moroney, Google

$$X = -1, 0, 1, 2, 3, 4$$

$$Y = -3, -1, 1, 3, 5, 7$$

```
model = keras.Sequential([keras.layers.Dense(units=1, input_shape=[1])])
model.compile(optimizer='sgd', loss='mean_squared_error')

xs = np.array([-1.0, 0.0, 1.0, 2.0, 3.0, 4.0], dtype=float)
ys = np.array([-3.0, -1.0, 1.0, 3.0, 5.0, 7.0], dtype=float)

model.fit(xs, ys, epochs=500)

print(model.predict([10.0]))
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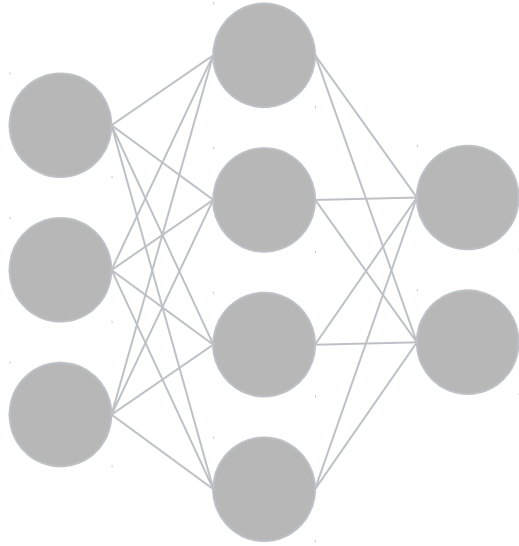
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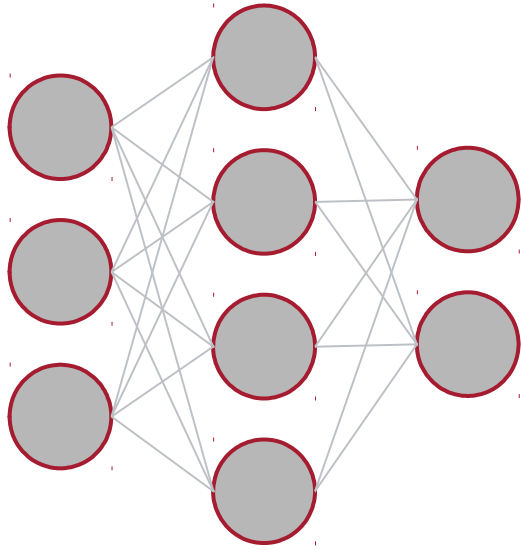
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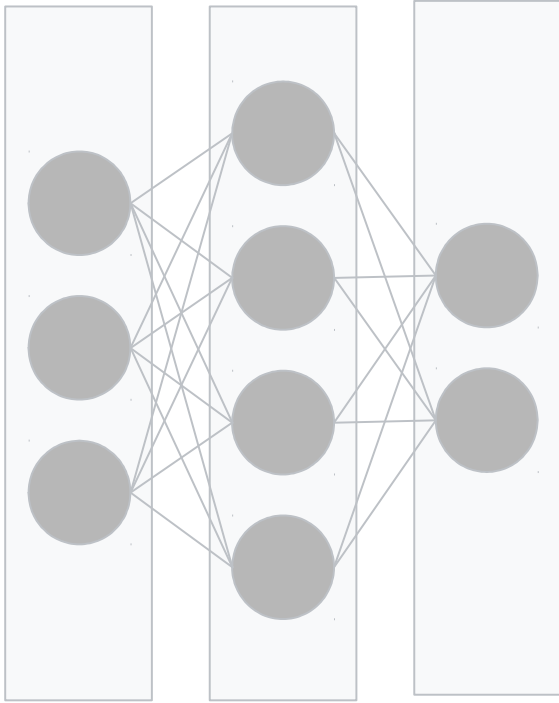
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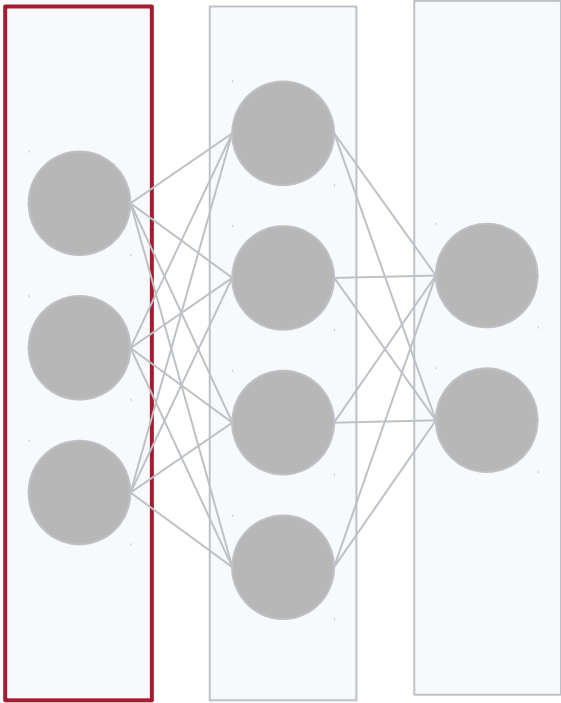
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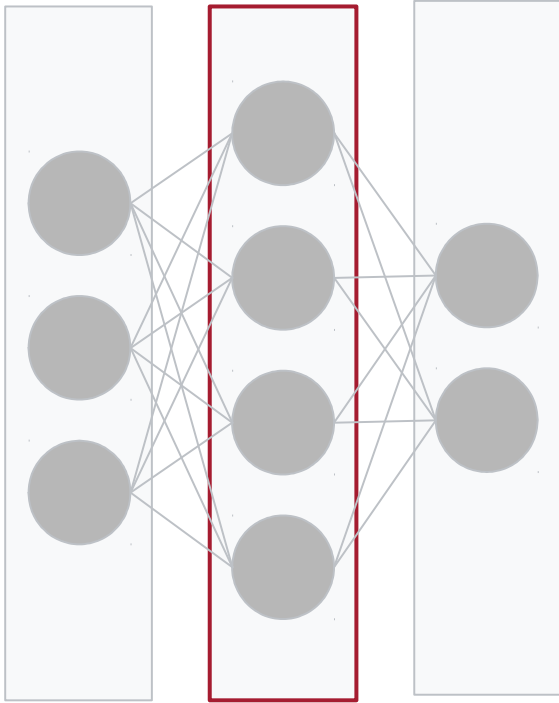


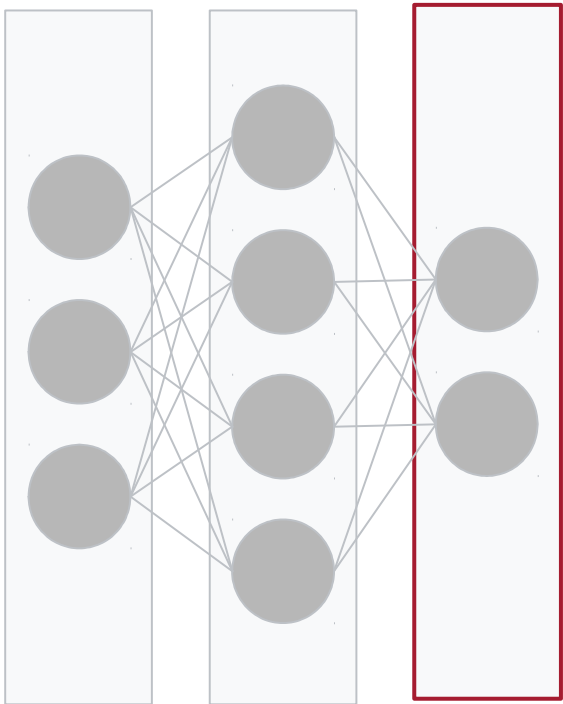


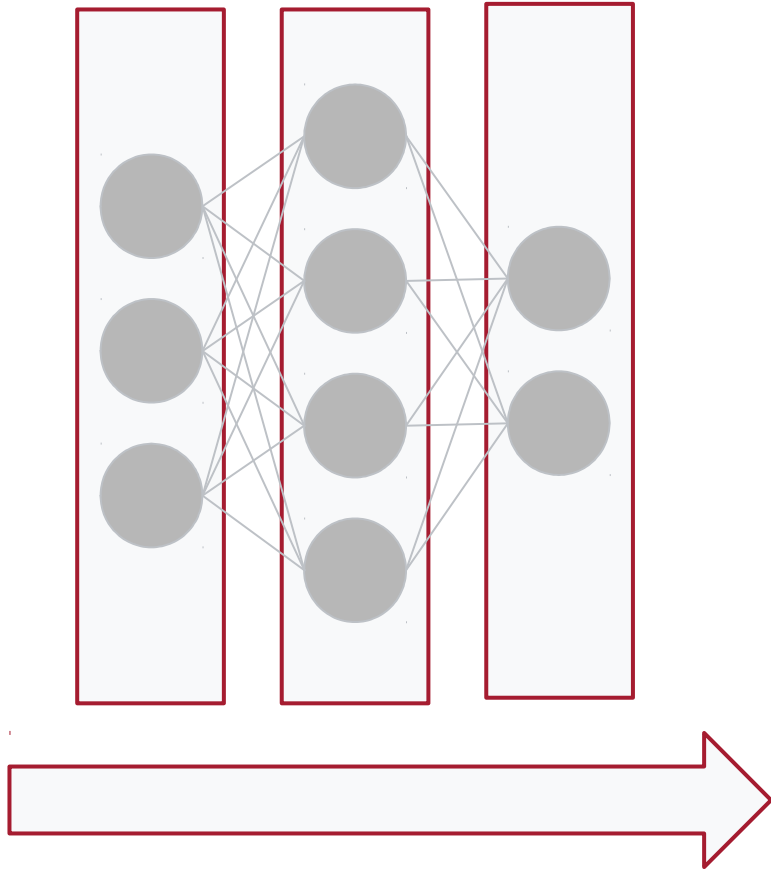


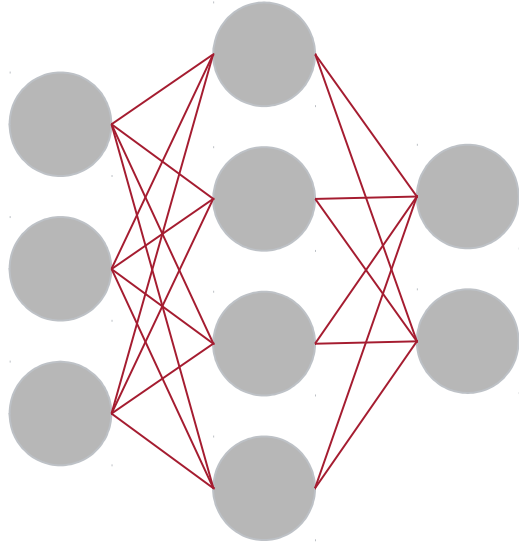












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Your turn!