ETGG 4803 **Neural Network Application**
Lab #10 (60 points) **Due Date: 26 April**

1. Apply the neural net from Lab #9 to the Room Occupancy data of Lab #7.
- To use a neural network on an actual data set, normalize input values to the range of the activation function. For the sigmoid function, this means input data should be normalized to [0, 1].
- Normalization of an attribute value can be achieved by setting *attribute_value* to (*attribute_value* - *attribute_min*) / *attribute_range*.
- For the Room Occupancy data, how many input neurons and output neurons are needed? Explain.
- Experiment with different numbers of hidden neurons.
- Bonus: Experiment with more than one hidden layer.
- Create a table giving the percentage of correct predictions for each of the test data sets.
- Write a comparison of the results of the neural network to those of the algorithms you were able to complete in Lab #7.