The University of Western Australia
Dept. of Electrical & Electronic Engineering
Prof. Thomas Bräunl

Robotics
GENG5508

Lab Assignment 8 – *Group* – Neural Networks	Points: 10

EXPERIMENT 1 (2 points)

Design a program that drives a robot in a circle around a given object, keeping a constant gaze at the object and recording 100 images during one full round.
- Save these files as: A00.ppm ... A99.ppm
- Use image resolution QQVGA
- Repeat this task for two additional objects, creating image files B_{ij}, C_{ij}

EXPERIMENT 2 (4 points)

Use a Neural Network system to learn the three different object categories.
E.g. use:
- FANN   http://leenissen.dk/fann/wp/
- CAFFE   http://caffe.berkeleyvision.org
- Tensorflow   https://www.tensorflow.org

EXPERIMENT 2 (4 points)

Line up all given objects in one line but random order.
Start the robot in one corner and let it search and identify each of the trained objects.