

Assignment 6- Deep Learning

Purpose: This assignment covers the basics of Deep learning i.e. Exploring and classifying images using the Multi-layer perceptron algorithm.

Key Information

- Type: *Individual*
- Weight: 5%
- Delivery: Course website upload
- Due Date: End of lab session

Expectations

You are expected to complete this assignment individually.

Respect for academic integrity is crucial to your success. Make sure you understand what constitutes acts of academic dishonesty in the page: [What is Academic Dishonesty?](#)

Instructions

1. Download the images files from <https://www.kaggle.com/huan9huan/walk-or-run>
2. There are two gz files, one is for train (about 600 png files), and the other is for testing (about 150 png files). Check to make sure you have the right data files
3. You will be using the multi-layer perceptron algorithm with a learning rate of 0.001, epoch=50 and batch_size = 100. You can use the grey-scale to collapse the image into a single channel
4. The task is to predict whether an image represents someone walking or Running
5. Use the Multi-layer perceptron algorithm to perform classification on this task.

Rubric

To achieve full marks on this assignment, you must have answered all questions above correctly with code submitted that has no errors.