**Assessment Brief**

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| Module Title: | Deep Learning |
| Module Code: | B9AI104 |
| Module Leader: | Dr Shahram Azizi Sazi |
| Stage (if relevant) | Award |
| Assessment Title: | Deep Learning test |
| Assessment Number (if relevant): | 1 |
| Assessment Type: |  |
| Restrictions on Time/Length : | N/A |
| Individual/Group: | Individual |
| Assessment Weighting: | 40% |
| Issue Date: |  |
| Hand In Date |  |
| Planned Feedback Date |  |
| Mode of Submission | Moodle and presentation |

The assignment is a Individual assignment. All learners must submit the working notebook with a full explanation and the created artefact. The results need to be presented by each group member.

**Question 1:**  Apply LSTM and simple RRN on a voice file. Evaluate each model in terms of RMSE for the task of reconstruction. Visualize the reconstructed signal.

**Question 2:**  Apply at least three types of CNN on a folder of image, evaluate each model underlying the same operational conditions and specify the best model.

Deploy the best model in a web application.

**Question 3:**  Apply Generative Adversarial Networks (GAN) on a sample dataset, evaluate the model and visualize the results.