

School of Computing: Assessment brief

| | |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Module title | Deep Learning |
| Module code | COMP5625M |
| Assignment title | Assessment 1 – Image Classification |
| Assignment type and description | Program development and performance evaluation |
| Rationale | To gain hands-on experience in building and using convolutional neural networks (CNNs) for image classification. You will gain experience in handling datasets, creating a CNN, evaluating the CNN using standard metrics, and comparing performance with a state-of-the-art network. |
| Word limit and guidance | The assessment is based on a Jupyter notebook where you are required to enter blocks of Python code for discrete pieces of functionality and display results as appropriate. |
| Weighting | 25% |
| Submission deadline | 10am, Monday, 6 th March |
| Submission method | Via Minerva |
| Feedback provision | Via Minerva |
| Learning outcomes assessed | <p>Apply deep learning for standard AI tasks using a state-of-the-art programming environment (PyTorch);</p> <p>Represent data from various modalities (in this case images);</p> <p>Critically evaluate systems using standard performance metrics;</p> |
| Module lead | David Hogg / Sharib Ali |
| Other Staff contact | n/a |

1. Assignment guidance

Please follow the instructions set out in the Jupyter notebook.

2. Assessment tasks

The assessment is divided into several parts as set out in the Jupyter notebook.

3. General guidance and study support

Please make use of the Lab sessions and Teams discussion for the module to ask questions about the assessment.

4. Assessment criteria and marking process

The maximum marks awarded for each section are stated in the Jupyter notebook. We will provide feedback on the individual sections as appropriate.

5. Presentation and referencing

6. Submission requirements

Please submit your work via the 'Submit my work' entry for this assessment.

7. Academic misconduct and plagiarism

Academic integrity means engaging in good academic practice. This involves essential academic skills, such as keeping track of where you find ideas and information and referencing these accurately in your work.

By submitting this assessment you are confirming that the work is a true expression of your own work and ideas and that you have given credit to others where their work has contributed to yours.

8. Assessment/ marking criteria grid

The maximum marks awarded for each part are stated in the Jupyter notebook.