Coursework Assignment Brief

Undergraduate

Academic Year 2024-25

Module Title:	Deep Neural Networks	
Module Code:	CMP6228	
Assessment Title:	Deep Learning Project	
Assessment Identifier:	**CWRK001**	Weighting: 20 %
School:	School of Computing and Digital Technology	
Module Co-ordinator:	Dr. Khalid Ismail	
Hand in deadline date:	**CWRK001: 3 pm 21st March 2025**	
Return of Feedback date and format	20 working days from date of submission (see Moodle for details).	
Re-assessment hand in deadline date:	3 pm 28th July 2025	
Support available for students required to submit a re-assessment:	Students must mutually arrange support sessions with the module coordinator/tutor(s).	
NOTE:	At the first assessment attempt, the full range of marks is available. At the re-assessment attempt, the mark is capped and the maximum mark that can be achieved is 40%.	
Assessment Summary	**Assessment 1 - Proposal** (weighting **20%**) In this assessment, student will write a proposal to solve a data science problem in a selected industrial dataset.	

IMPORTANT STATEMENTS

Standard Postgraduate Regulations

Your studies will be governed by the BCU Academic Regulations on Assessment, Progression and, Awards. Copies of regulations can be found at https://icity.bcu.ac.uk/Academic-Services/Information-for-Students/Academic-Regulations-2018-19

For courses accredited by professional bodies such as the IET (Institution of Engineering and Technology), there are some exemptions from the standard regulations and these are detailed in your Programme Handbook

Cheating and Plagiarism

Both cheating and plagiarism are unacceptable and the University maintains a strict policy against them. It is YOUR responsibility to be aware of this policy and to act accordingly. Please refer to the Academic Registry Guidance at https://icity.bcu.ac.uk/Academic-Registry/Information-for-Students/Assessment/Avoiding-Allegations-of-Cheating

The basic principles are:

- Don't pass off anyone else's work as your own, including work from "essay banks". This is plagiarism and is viewed extremely seriously by the University.
- Don't submit a piece of work in whole or in part that has already been submitted for assessment elsewhere. This is called duplication and, like plagiarism, is viewed extremely seriously by the University.
- Always acknowledge all of the sources that you have used in your coursework assignment or project.
- If you are using the exact words of another person, always put them in quotation marks.
- Check that you know whether the coursework is to be produced individually or whether you can work with others.
- If you are doing group work, be sure about what you are supposed to do on your own.
- Never makeup or falsify data to prove your point.
- Never allow others to copy your work.
- Never lend disks, memory sticks or copies of your coursework to any other student in the University; this may lead you to being accused of collusion.

By submitting coursework, either physically or electronically, you are confirming that it is your own work (or, in the case of a group submission, that it is the result of joint work undertaken by members of the group that you represent) and that you have read and understood the University's guidance on plagiarism and cheating.

You should be aware that coursework may be submitted to an electronic detection system to help ascertain if any plagiarised material is present. You may check your own work prior to submission using Turnitin at the Formative Moodle Site. If you have queries about what constitutes plagiarism, please speak to your module tutor or the Centre for Academic Success.

Electronic Submission of Work

It is your responsibility to ensure that work submitted in electronic format can be opened on a faculty computer and to check that any electronic submissions have been successfully uploaded. If it cannot be opened it will not be marked. Any required file formats will be specified in the assignment brief and failure to comply with these submission requirements will result in work not

being marked. You must retain a copy of all electronic work you have submitted and re-submit if requested.

Learning Outcomes to be Assessed:

1. Evaluate different deep learning techniques for suitability to a given knowledge discovery problem.
2. Validate deep learning methods using modern deep leaning tools.
3. Professionally report deep learning results providing clear solutions to the identified knowledge discovery problems.
4. Critically appraise recent trends in deep learning literature and industry relevant to your work.

Assessment Details:

Title: Assessment 1 - Proposal
Type: Coursework
Style: Individual proposal

Rationale: Assessment 1 aims to encourage students to search and find an industrial challenge problem and demonstrate their understanding of the main concepts of deep learning and the different approaches to solve the problem. **(assessment weighting is 20%).**

Description: In this assessment:

- Each student will be required to select a real industrial dataset of interest
- Each student will identify a particular data science problem.
- Students must demonstrate their full understanding of deep learning approaches in coping with the proposed problem.
- After agreeing with the tutor(s), each student will submit **Assessment 1** as a written report as detailed in Additional Information below (Moodle submission by **week 8**).).

Workload: Assessment 1 will have a maximum word count of 1500 excluding figures and references.

Transferrable skills:

- Problem solving
- Analytical skills

Additional information:

- Each student will submit **Assessment 1** as a written report. (Moodle submission by the given deadline). The report must include:
    - Title of report
    - Name and Student ID

    - Section 1: introduction. This section should summarise and highlight the aim of the proposal
    - Section 2: Motivation and objectives. This section should include a description of the selected dataset and a detailed description of the problem.
    - Section 3: Related work. This section should demonstrate the main concepts of related techniques that have been previously used to solve the problem.
    - Section 4: Proposed model. This section should demonstrate the suitability of the proposed solution in solving the data science problem.
    - References (as per Harvard Referencing Style: https://icity.bcu.ac.uk/Library-and-Learning-Resources/Referencing/harvard-referencing).
- Students must use LaTeX to produce the reports.

For advice on writing style, referencing and academic skills, please make use of the Centre for Academic Success: https://icity.bcu.ac.uk/celt/centre-for-academic-success

Workload: Assessment 2 will have a maximum word count of 3000 excluding figures and references.

A typical student will spend up to 70 hours of study to pass this assessment.

Transferrable skills:

- Problem solving
- Programming skills
- Analytical skills
- Time management
- Project management
- Written communication skills

Marking Criteria:

Table of Assessment Criteria and Associated Grading Criteria

Task	Assessment 1
Assessment Criteria →	**1. Evaluate different deep learning techniques for suitability to a given knowledge discovery problem.**
Weighting:	**20%**
Grading <u>Criteria</u> **0 – 29%** **F**	The proposal and basic concepts of deep learning are missed or not understood. No details of the dataset and the deep learning problem.
30 – 39% **E**	The proposal and basic concepts of deep learning are poorly understood. Little details of the dataset and the deep learning problem.
40 – 49% **D**	The proposal and basic concepts of deep learning are demonstrated satisfactory. Complete details of the dataset but deep learning problem is not well introduced.
50 – 59% **C**	The proposal and basic concepts of deep learning are almost understood. Complete details of the dataset and deep learning problem.
60 – 69% **B**	The proposal and basic concepts of data visualisation are understood from the report. Details of the dataset and deep learning problem are there but missing clarification.

70 – 79% **A**	The proposal and basic concepts of deep learning are nearly demonstrated and understood from the report. Details of the dataset and deep learning problem are clear.
80 – 89% **A+**	The proposal and basic concepts of deep learning are accurately demonstrated and understood from the report. Details of the dataset and the deep learning problem are excellent.
90 – 100% **A***	The proposal and basic concepts of deep learning are professionally demonstrated and easily understood from the report. Details of the dataset and deep learning problem are appealing.

Submission Details:

- **Format:** Required software for producing the reports is LaTeX.
- File format for the submissions is **PDF**.

Regulations:

If you submit an assessment late at the first attempt, then you will be subject to one of the following penalties:

- if the submission is made **between 1 and 24 hours** after the published deadline the original mark awarded will be reduced by **5%**. For example, a mark of 60% will be reduced by 3% so that the mark that the student will receive is 57%. ;
- if the submission is made between **24 hours** and **one week (5 working days)** after the published deadline the original mark awarded will be reduced by 10%. For example, a mark of 60% will be reduced by 6% so that the mark the student will receive is 54%.
- **if the submission is made after 5 days following the deadline, your work will be deemed as a fail and returned to you unmarked.**

The reduction in the mark will not be applied in the following two cases:

- the mark is below the pass mark for the assessment. In this case the mark achieved by the student will stand
- where a deduction will reduce the mark from a pass to a fail. In this case the mark awarded will be the threshold (i.e.50%)

Please note:

- **If you submit a re-assessment late then it will be deemed as a fail and returned to you unmarked.**

Feedback:
Feedback for each deliverable will be provided via Moodle. However, for Assessment 1 the students are strongly encouraged to discuss their submission in person with the tutors. The students are also strongly encouraged to discuss their draft work with tutors in lecture sessions, whenever time permits.

Marks and Feedback on your work will normally be provided within 20 working days of its submission deadline.

Where to get help:

Students can seek reasonable feedback (no more than 10 minutes on average each week) outside lecture sessions by contacting the module tutors via email.

Students can get additional support from the library support for searching for information and finding academic sources. See their iCity page for more information: http://libanswers.bcu.ac.uk/

The Centre for Academic Success offers 1:1 advice and feedback on academic writing, referencing, study skills and maths/statistics/computing. See their iCity page for more information: https://icity.bcu.ac.uk/celt/centre-for-academic-success

Link to My Assignment Planner tool: http://library.bcu.ac.uk/MAP2/freecalc-mail/

Fit to Submit:

Are you ready to submit your assignment – review this assignment brief and consider whether you have met the criteria. Use any checklists provided to ensure that you have done everything needed.

The lists of sections for each deliverable is provided in “Assessment Details” earlier in this document. Those lists of sections constitute the checklists.

Check List:	**Completed? (tick the item).**
Did you follow all the steps outlined in the section titled ‘Assessment Details’?	
Did you Include all the sections as outlined in ‘Assessment Details’?	
Did you use Harvard Referencing?	
Did you follow the conventions of academic writing?	
Is the file to be submitted in the PDF format?	