

Master of Applied Technologies		
Course No: COMP8831	Machine Learning	Level: 8 Credits: 15

Student Name:	Student ID:
Assessment Type: Project Proposal Report	Weighting: 10%
Due Date and Time: 05/04/2024 23:59	Total Marks: 100

#### Student declaration

I confirm that:

- This is an original assessment and is entirely my own work.
- The work I am submitting for this assessment is free of plagiarism. I have read and understood the [Academic Integrity Procedure](#) here. I have also read and understood the [Student Disciplinary Statute](#) here.
- Where I have used ideas, tables, diagrams etc of other writers, I have acknowledged the source in every case.

Students Signature:	Date:
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## **Assignment Aims**

1. To propose a machine learning project which integrates the skills and knowledge gained through the course.
2. To achieve greater awareness of the latest artificial intelligence tools and techniques for prediction, recognition, optimisation, and decision making.
3. To understand the principles, advantages, limitations and possible applications of machine learning algorithms.

## **Instructions**

### **Assignment Task: Proposal Report Marks**

**100**

You are to search, select, and propose a machine learning project in a written report. Your proposal report should be between 1500 and 2000 words (the proposals should NOT be longer than five pages including all sections and references, font: size 11-12, Times family, single space).

The proposal weighs 10 percent of your final mark, so it needs to be written carefully.

Each group is required to submit only one proposal. In a two-member group, at least two different learning methods need to be discussed for the implementation (in the Project Methodology section).

The proposal should include these main sections: Title of the project, Full name of the group member(s), Abstract, Project Methodology, References.

A summary of the project and its application should be discussed in the Abstract section. Then, within the Project Methodology section, you can briefly describe details of the project implementation, including:

- a) Preferred learning methods,
- b) Required datasets for training and testing and where the datasets can be obtained from,
- c) Brief justification on how your preferred learning methods are fitted with the proposed topic,
- d) Preferred programming language for the project implementation.

Please note that your proposed project should **fit in the supervised learning** domain.

The proposals should be uploaded into Moodle through Turnitin Assignment Submission module (provided under Assessments, "Project Proposals Submission Link") before the due date. The similarity **excluding references** should be less than 10%.

Each proposal is reviewed by the lecturer and individual feedback will be provided in the second week of the course. Once the proposal gets approved, the group can start implementation of the second assignment accordingly (the instructions will be provided separately).

#### **Report Notes:**

1. Organise your report for readability and integrity, and create Appendices wherever appropriate.
2. Report should follow Unitec's standard format (less than 10% quoted) and should include following sections:
  - a. Title Page
  - b. Table of Contents
  - c. Abstract or Executive Summary
  - d. Methodology
    - i. Preferred Learning Method
    - ii. Datasets Required for the Project
    - iii. Brief Justification on Why the Method is Suitable for Selected Project
  - e. Summary
  - f. References (in **IEEE style**)
3. Please use MS Word or Latex for preparing your report.
4. The soft copies of the reports should be uploaded into **Moodle** through Turnitin Assignment Submission module (provided under Assessments, "**Project Proposals Submission Link**") before the due date.

Marks will be deducted if you fail to draw upon appropriate professional and academic literature in your writing and if the assignment is not written and presented in a professional manner. You can quote other people's work (websites, conference proceedings, industry magazines, journals, and books) provided that you cite and reference them correctly in your report. However, most of your report should be written in your own words. **Each quotation or table or diagram from another source must be accompanied by a discussion in your own words.** For example, if you have included a table from another source then you must write about what you think the table shows, why you have included it, why it is relevant and so on. Please remember to format your report so that it is easy to discern your word, thoughts and ideas from your sources' thoughts and ideas.

When choosing sources please check that they have passed some form of quality assurance (for this reason, books, journal articles and conference articles are a good choice). Also bear in mind that if it is difficult to identify the author, year or title of an article then it has not been subject to quality assurance.

Plagiarism will be reported to the Programme Authorities who may award zero marks or refer the matter to the Discipline Committee, which has powers of suspension/exclusion.

Your report must end with a section giving references – this will show where you got your source material from. Please use **IEEE referencing style**, examples can be found in the following link

<http://libguides.murdoch.edu.au/IEEE/sample>

### **Presentation of the Report:**

- 1) Make sure you have a table of contents.
- 2) Make sure your sections/subsections have numbers.
- 3) Make sure each page has a number.
- 4) Make sure your table of contents, section numbers and page numbers all correlate.
- 5) If figures are used, then put captions on all figures (diagrams).
- 6) Make sure that new page breaks are at appropriate places (i.e. NOT just after new sections or in the middle of a figure or diagram or table row/column).
- 7) Cite all work that has come from other sources.
- 8) Make sure that all sources cited are listed in your list of references.

### **Grading:**

#### Criteria on Report

Your report will deserve an A grade when above requirements are met in full. Your reports will be marked on content, report style, and appropriate and correct English. While I will be concentrating on the quality of your report, weakness in one area will result in a B grade. Poor analysis & writing will receive a score no more than C grade.

### **Marking Criteria:**

<b>Report: 100 marks</b>		
<b>Style and Language</b>	<b>25</b>	
<b>Abstract / Overview</b>	<b>10</b>	
<b>Methodology:</b>	<b>55</b>	
<b>Preferred Learning Methods</b>	(10)	
<b>Required Datasets</b>	(15)	
<b>Method Justification</b>	(30)	
<b>Referencing Style</b>	<b>10</b>	

**Your report will be marked based on coverage, relevance, clarity, degree of your input, and quality of your writing.**

### **Late Submission of Assignments**

Assignments submitted after the due date and time without having received an extension through Affected Performance Consideration (APC) will be penalised according to the following:

- 10% of marks deducted if submitted within 24hrs of the deadline
- 20% of marks deducted if submitted after 24hrs and up to 48hrs of the deadline

- No grade will be awarded for an assignment that is submitted later than 48hrs after the deadline

Assignments submitted in more than 48 hours late will not be marked unless Affected Performance Consideration (APC) apply. So, it is better to submit an incomplete assignment on time.

### **Affected Performance Consideration**

A student, who due to circumstances beyond his or her control, misses a test, final exam or an assignment deadline or considers his or her performance in a test, final exam or an assignment to have been adversely affected, should complete the Affected Performance Consideration (APC) form available from Student Central or online:

<https://www.unitec.ac.nz/current-students/study-support/affected-performance-consideration>

### **Assistance to Other Students**

Students themselves can be an excellent resource to assist the learning of fellow students, but there are issues that arise in assessments that relate to the type and amount of assistance given by students to other students. It is important to recognise what types of assistance are beneficial to another's learning and also what types of assistance are unacceptable in an assessment.

#### **Beneficial Assistance**

- Study Groups.
- Discussion.
- Sharing reading material.
- Testing another student's programming work using the executable code and giving them the results of that testing.

#### **Unacceptable Assistance**

- Working together on one copy of the assessment and submitting it as own work.
- Giving another student your work.
- Copying someone else's work. This includes work done by someone not on the course.
- Changing or correcting another student's work.
- Copying from books, Internet etc. and submitting it as own work.

Do you want to do the best that you can do on this assignment and improve your grades?

You could:

- Talk it over with your lecturer
- Visit Student Success and Achievement for learning advice and support
- Visit the Centre for Pacific Development and Support
- Visit the Centre for Maori Development and Support