

Assignment Submission

Start Assignment

- Due Friday by 23:59
- Points 20
- Submitting a file upload
- Available 29 Sep at 0:00 - 24 Oct at 23:59



Assignment Submission

Title: Multi-class classification

Due Date: **Week 7 Friday**

Weighting: 20%

Declaration and Statement of Authorship

1. I/we have not impersonated, or allowed myself/ourselves to be impersonated by any person for the purposes of this assessment.
2. This assessment is my/our original work and no part of it has been copied from any other source except where due acknowledgement is made.
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2. I/we accept that use of my/our Swinburne account to electronically submit this assessment constitutes my/our agreement to the Declaration and Statement of Authorship.
3. If I/we do not agree to the Declaration and Statement of Authorship in this context, the assessment outcome may not be valid for assessment purposes and may not be included in my/our aggregate score for this unit.

Penalties for plagiarism range from a formal caution to expulsion from the university, and are detailed in the [Plagiarism and Misconduct webpage](#).

Assignment rubric

Criteria	Ratings				Pts
Report A report (PDF) consisting of two sections: Methodology and Result and Discussion. The report should be written in a well-flowing manner, including the convolutional neural network (CNN) architecture, training scheme, and any other details of interest, and discuss the differences in performance between the different approaches.	7 to >5.0 Pts Good Provide additional qualitative and quantitative results that demonstrate new ideas and discoveries and stand out from other students in the class.	5 to >3.0 Pts Average Clear explanation of methodology and well-presented experimental results and analysis.	3 to >1.0 Pts Fair Fair explanation of the methodology and lacks experimental results and analysis that support the rationale.	1 to >0 Pts Poor The CNN approaches are not well described, preventing the tutor from understanding the context of the proposed methodology. Experimental results are missing and recommended evaluation metrics are not used.	7 pts
Video presentation	3 to >2.0 Pts Good Good presentation. Required information provided is standout from other students in the class. A very good and clear level of understanding of the CNN approaches deployed.	2 to >1.0 Pts Average Good presentation. Required information is provided in a satisfactory manner. Some areas needed more detail.		1 to >0 Pts Poor Poor presentation. Vague information provided. No clear validation of clarification. Unable to show understanding of the CNN approaches deployed.	3 pts
Model deployment and web application	3 to >2.0 Pts Full marks A good and outstanding Gradio design for an AI model application	2 to >1.0 Pts Average An average Gradio design with basic modules for an AI model application		1 to >0 Pts Poor Poor implementation of Gradio for an AI model application	3 pts

Criteria	Ratings				Pts
AI modeling framework This element evaluates the design flow for the implementation of your network architecture, including data input, data pre-processing, data loader, model architecture, optimization function, metrics evaluation and training scheme.	7 to >5.0 Pts Good A very good and strategised code implementation that takes into account the enhancement of the generalisation aspect of the model, and achieves outstanding accuracy.	5 to >3.0 Pts Average An average, standard design of code implementation that is able to successfully train a model to achieve descent accuracy.	3 to >1.0 Pts Fair Fair code implementation that fails to achieve descent model performance due to missing or incomplete modules in network architecture framework	1 to >0 Pts Poor Missing modules in the AI modeling framework, leading to model training failure	7 pts
Total points: 20					