UDL Coursework Marking Criteria

Group ID	
Group Mark	

	Criterion	Description	Mks
Data pre-processing (4)	Data pre-processing	Display a few sample images from the dataset along with their age and gender labels. Effective use of data augmentation.	/4
Model A (44)	Model construction	A custom multi-output CNN model is correctly defined. Feature maps fed to the first fully connected layer must be less than 10 x 10. Appropriate loss functions and metrics used. Some techniques are considered for preventing overfitting.	/12
	Effective training	Learning curve figures are produced for monitoring the training. No significant underfitting or overfitting is observed.	/6
	Model Explanation	Clear explanation of the custom CNN architecture. Detailed description of training process and hyperparameter setup. Insightful discussion of model performance based on learning curves.	/8
	Age performance	Age precision: Mean Absolute Error (MAE) on the test set (2000 images) is:	/9
	Gender performance	Gender prediction: Classification accuracy on the test set is:	/9
Model B (44)	Model construction	A multi-output model is defined based on one existing CNN model. Appropriate layer freezing, fine-tuning, and training strategy. Proper loss functions and metrics used. Some techniques are considered for preventing overfitting.	/12
	Effective training	Learning curve figures are produced for monitoring the training. No significant underfitting or overfitting is observed.	/6
	Model Explanation	Clear explanation of model architecture based on a pre-trained model. Clear explanation of transfer learning approach. Insightful discussion of model performance based on learning curves.	/8
	Age performance	Age precision: Mean Absolute Error (MAE) on the test set (2000 images) is:	/9

	Gender performance	Gender prediction: Classification accuracy on the test set is:	/9
Summary (8)	Good summary and discussion	Comprehensive comparison and discussion of the two models. Insightful discussion of model strengths, limitations, and potential improvements. Insight of applying deep learning to real-life problems.	/8
Penalty	Any additional work from the marker that could have been avoided	1. Incorrect model links provided. (-5) 2. Forgetting to set the models "Anyone with the link can access". (-5) 3. Cleared output cells. (-1 per instance, up to -5)	
		Total	**/100**

Comments