Project Review Proforma – Review number: 5 Date: 3/4/2024

Summarised Planned State of Project:

Thesis Draft:

1. Submission of thesis draft.

Perform experiments to deploy 1D-CNN into STM32MP157F-DK2:

- 1. Test various architectures and determine if the model can be compiled and built on the hardware.
- 2. Record the accuracy, compatibility and size of the model.

Fine-tune the model with various hyperparameters to mitigate overfitting:

1. Tested various hyperparameters such as batch normalization, dropout, regularization, learning rate, and early stopping to determine if the model improved.

Actual Progress Since Last Review

Thesis Draft:

1. The thesis draft was completed and submitted according to plan.

Perform experiments to deploy 1D-CNN into STM32MP157F-DK2:

- 1. Highest accuracy model was determined.
- 2. Hardware limitations were determined.
- 3. The 1D-CNN model was deployed into hardware.
- 4. The task was performed according to plan.

Fine-tune the model with various hyperparameters to mitigate overfitting:

- 1. Fine-tuning of the model was carried out.
- 2. The overfitting issue is mitigated.
- 3. The task was performed according to plan.

Next Steps

- 1. Create a user interface (UI) dashboard to showcase the real-time result of the model deployed into the hardware.
- 2. Work on the final thesis.
- 3. Compile all of the documents, scripts, and logbooks to be submitted.

Supervisor Feedback

The supervisor proposed the creation of a UI dashboard to present real-time results generated by the deployed model on the hardware platform. This is to emphasize the importance of developing a user-friendly interface to visualize and interpret the model's outputs in real time. By integrating a UI dashboard into the project, stakeholders and end-users can conveniently access and interpret the emotion classification results, enhancing the project's usability and practicality.