

Progress log 5: 25/02/19 – 03/03/19

Task number	Task name	Begin Date	Due date	Time spent	Completed ?	Comments
1	Get the app to work in the background of the users phone. Ensure that it takes in speech as input	25/02/19	28/02/19	40 hours	Yes	
2	Improve on the TensorFlow model by adding more words for recognition	28/02/19	03/03/19	28 hours	Yes	I have successfully improved my model in recognising more words, but the accuracy is slightly low (e.g. ~80%.) I am currently trying to improve the model by optimizing hyperparameters and getting it to take more training steps
				68 hours	0 tasks remaining	

Purpose of tasks

For the fifth week of my project I attempted to get the app to work in the background of the user's phone and at the same time, take speech as input. This task was something I thought was going to be difficult at the beginning of my project, but to my surprise it was fairly simple thanks to the classes provided by Android Studio. They made it much easier/quicker to work through this task. My initial plan was to somehow fit my TensorFlow model in the background to take in the speech. But this objective was something I could not implement. Instead I used the built-in Google speech recognition to take in speech as input in the background. This is probably the best solution in terms of power consumption because if my TensorFlow model were to operate in the background, then it would take a lot of battery power as opposed to the built-in Google speech recognition. Another task I was working on was improving the TensorFlow model by adding more words for recognition. The details of this task can be seen in the comment's column above.

Discussion with supervisor

I couldn't meet with my supervisor this week as I had a job interview elsewhere. But based on the progress I have made, I think I am going to start on user testing and software testing for the whole of next week. At the same time, I will also make a start on the final report, as the deadline for this is looming.