

21 June 2017

Time:

1.30 pm

Duration:

+/- 45 minutes

Present:

- Assoc. Prof. James Gain
- Assoc. Prof. Deshendran Moodley
- Anna Borysova
- Shaheel Kooverjee
- Erin Versfeld

Excused:

None

Summary:

- The concerns raised by members of staff in the presentations around the Myo are most likely due to the relative newness
- Feedback on the proposal highlights the need to write for a general audience in the final paper write-up
- Issues with the ethical clearance application included the informed consent form and the description of the participant selection.

Next meeting:

5 July 2017, time to be decided

Points of Action for next meeting:

- A, S and E will revise the application for ethical clearance and submit it to J and D by 5pm on Thursday, 22 June.
- A, S and E will revise the project proposal and submit it to J and D by 5pm on Friday, 23 June.
- D will send a paper on methodologies in machine learning to the team.

Discussion:

- E queried the concern that was raised in the presentation that the Myo would require more work than any of the other devices. J confirmed that it was most likely due to the fact that it was relatively new.
- E reported on her meeting with Edwin. This information can be found in the minutes for that meeting.
- J indicated that additional work should also be done on developing a more overarching introduction and addressing the research to a more general audience.
- D emphasised the need to motivate the use of machine learning in this research. There has been significant deviation from the original project idea while scoping the

project for Honours, so consideration needs to be given to whether the application as a learning tool is still relevant.

- **S** queried what Michelle was referring to by the 'methodology' in her comments on the proposal. **J** indicated that was predominantly a style issue. **D**, however, reiterated the need to comply with the department standards and offered to send a paper describing such methodologies.
- **J** raised issues with the following aspects of the ethical clearance application:
 - The informed consent form still requires some details to be filled in and edited.
 - The Kinect records images of hands, which may be sufficient to identify certain individuals. This needs to be addressed in certain parts of the application. Faces need to be cropped out of these images before being committed to the public database.
- **J** and **D** suggested examining if the individual machine learning techniques could indicate the probability of the correctness of the classification of the performance of a gesture.
- **D** indicated that characteristics of participants needed to be made clear:
 - Race, muscle density and gender should be balanced
 - Participants should be wearing no bandages
 - The dataset will unfortunately be biased in terms of age as students will be selected
- Expert review of the performance was determined to be infeasible at this stage of the project as it would require hiring someone
- The revised ethical clearance application will be submitted to **J** and **D** on Thursday 22 June at 5pm.