31 May 2017

Time:

1: 45 pm

Duration:

+-45 minutes

Present:

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

Excused:

None, all were present.

Summary:

Discussed proposal and areas of improvement (features, length, cut irrelevant info, 'qualitative' evaluation). Got results from previous points of action: room booking for data gathering and list of potential ML libraries. Discussed presentation tips, and the possible solutions to the kinect driver problems.

Next meeting:

Wednesday 7 June, 11:00 am (practice presentation)

Points of Action for next meeting:

- **D**
  - Check availability for practice presentation (11am. Wednesday 7 June)
- **J**
  - Ask Sam Chetty about fancy computers in honours lab.
- **S** will test usability of Kinect with lab computers and/or sharing Erin's laptop
- **A**, **S**, and **E** will continue experimenting with data capturing methodologies and implementations of their techniques.
- **A**, **S**, and **E** will work on implementing proposal changes
- **E** will post the ethics thing

Discussion:

The following issues were raised:

- Project proposal:
  - Features
    - **D** indicated that these should be kept to a sufficiently high level and need not be very long. Do not mention specifics, demonstrate awareness, hint at exploration?
  - Length of proposal
    - Remove that one bayesian inference section

        - Remove tool usability section, try avoid HCI
        - Fix REFERENCEs
- Recording test data
    - Make bash script run start three programs at the same time (no need for the same language)
    - Visualisation of hand interpretation (leap) to be kept hidden when recording data
    - **J** confirmed availability of room 300: book with Sam Chetty
    - **J** also indicated that he would be able to look into how the team can go about securing an experimental lab for gathering pilot data
- Kinect issues (Drivers on Shaheel's laptop broken - kinect unusable on his laptop)
    - Reinstall OS? No.
    - Use Erin's laptop? Maybe.
    - Test lab computers (possibly the high performance computer when it's ready)
    - Use most convenient language
    - Go through whole 'pipeline' (incl. Classifier etc) before relying on collected data
    - ...
- ML Libraries to use (each member to investigate some libraries):
    - Grt
        - Is it trusted?
        - Sufficient user base?
    - Weka
        - Java
    - R
    - Scikit learn
        - Python
    - Apache emlep
    - Open CV
        - Dense
        - Image processing
        - C++, python
- Moving between languages
    - Have interfaces and stuff
    - Amazing socket system that solves all our problems
        - Transfers between languages
        - We must struggle instead/first
- System eval
    - Analytical eval?
    - For system responsiveness
    - …
    - 'Qualitative' eval:
        - Decide which algorithm is best not just according to most true positives, but also least false classifications for eg
        - Use for learning system vs other applications
        - (reducing a type of error may be more useful that maximising true positives)
- Presentation tips:
    - V. high level
    - Provide context, introduction etc
    - Gloss over classifier details, explain what a classifier is
    - Introduce in SASL if enough time
    - Time!!
    - Prepare for mean questions
        - Extra slides for question answering