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