COMP30170 Final Year Project
ConvNets for iOS Gesture Recognition Applications
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1   Update

- Got an Iphone 6. Doesn't have force touch as that is only on 6s and above. Will have to work with what I have for now anyway.

- Currently working on sequence to sequence RNN to see if I can detect numbers with multiple digits. This is mainly to facilitate learning more about tensorflow. It may proove to be some nice extra functionality in my project though.

- Added unicode flags to iOS app. Trying to make the user interface more appealing and user friendly.

- Looking more into tensorboard also. Seems like it will be an indispensible tool to have in terms of getting a deeper understanding of the NN's I create.

2   Items for discussion

- Best way to show the unicode flags?

- Talk through mnist with summmaries code and how it links to tensorboard.

- data persistance in iOS?

3   Plan for Next Week

In order of priority from top to bottom

- Make a timetable for the year, more detailed one until christmas?

- Get permission to record data

- Sequence to sequence neural network running

- Start into further deep learning resources e.g. [2–4]. Tensorflow also.

- Investigate paramaterisation of bitmaps.

4   Meeting Notes

hoffe transform - ellipse

Youtube videos on ios recognition

keep on top of lit review

Need to get on top of NN's and tensorboard for presentation

sequence to sequence

600

ios versions

Use Siri to speak numbers

References

[1] P. Hegarty. (2016) Developing ios 8 apps with swift. [Online]. Available: https://itunes.apple.com/en/course/developing-ios-8-apps-swift/id961180099

[2] Ng. (2016) Stanford course on machine learning. [Online]. Available: https://www.coursera.org/learn/machine-learning

[3] V. Vanhoucke. (2016) Udacity course on machine learning. [Online]. Available: https://www.udacity.com/course/deep-learning--ud730

[4] NVIDIA. (2016) Course on deep learning. [Online]. Available: https://developer.nvidia.com/deep-learning-courses