

## Supervisor Meeting Minutes 03

**Date/Time** 12th February 2018, 1.20-2.30pm

**Venue** SIS building Meeting Room 4.3

**Team Attendees** Kevin Chong, Lim Yan Ling

**Supervisor** Prof Meena

### **Agenda:**

1. Update progress of project
2. Update discussion with sponsor

| S/N | Note/Task  | Actor | Follow-up Action |
|-----|--|-------|------------------|
| 1.  | <ul style="list-style-type: none"><li>• Kevin explained Dynamic time mopping and k means/ k nearest neighbour for clustering.</li><li>• We are using dynamic time mopping and LB KEOGH because Euclidean distance is a bad measure for time series clustering.</li><li>• We explained the raw data we have</li><li>• Our model is the code and we are using it to implement the time series clustering</li><li>• We have 2 years' worth of data and we did data aggregation, from min ticks into day data</li><li>• We will be using 5 currency pairs, CHF, CAD, GBP, EUR, JAPYEN. Use USD as a base comparison. 5 datasets will be processed</li><li>• We have included additional data fields such as the Standard Deviation of the Closing Price, Day Closing Price and Moving Average Closing Price.</li><li>• We are using Standard deviation and percentage change. We are not using moving average because it has same issue as close.</li><li>• Prof suggested to plot ACF to understand the seasonality, what was the trends etc for the exploratory analysis</li><li>• Currency pairs for the data. Prof asked if we want to include more currency pairs? Kevin explained that it depends on the results. We could add more or remove currency pairs after the results.</li><li>• Prof asked about the rationale for currency pairs. This is because the heaviest weight would affect dollar movements</li></ul> |       |                  |

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|----|--|-----------------|---|
|    | <ul style="list-style-type: none"> <li>Kevin found a new source, GitHub and we would be using use this source package for DTW and K Means.</li> </ul>  |                 |   |
| 2. | <ul style="list-style-type: none"> <li>We have updated our client on our approach and he finds it useful.</li> <li>We will be using Python instead of R programming because it is easier to connect python to the brokerage system and it is more convenient for the client.</li> <li>Prof suggest that we run both codes on R programming and python to compare the results.</li> <li>Prof asked if we have any problems with the packages? We do not have any issues and we are interpreting the clusters</li> </ul> | Kevin           | Run codes on both R programming and Python<br><b>(Completed)</b>                  |
| 3. | <ul style="list-style-type: none"> <li>Prof will update Prof Kam about our approach</li> <li>Email/ Upload on Elearn Dropbox: EDA, data set, and minutes for prof to refer to</li> <li>Prof suggest that we include clustering analysis and explain the results for mid-terms deliverables</li> </ul>  | Yan Ling<br>All | Email prof and upload EDA, data set, and minutes on Dropbox<br><b>(Completed)</b> |