FinTech Industrial Project Progress Check Form (Final)

Student Name & ID: HE Chuang 1155162385

Project title: Similarity analysis of financial time-series with shapelets and beyond

Sponsoring Organisation: ASTRI

Industrial Supervisor: Mr. Peter Xiang

Instructions: This form is to report the student’s progress up to the final. Please complete the form using Microsoft Word and add rows if necessary. Completion percentage refers to the percentage of the original plan completed. If the percentage is less than 100%, explanation must be provided. Please report your progress accurately and evidence should be provided to the supervisors for them to verify.

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| Task | Actual achievements | Completion  Percentage | Explanation |
| Have a primary understanding about Shapelet method | By doing literature reading and practicing, I knew how to use shapelet methods in practical work and some algorithms to realize shapelets. And I wrote a literature review about shapelets. | 100% |  |
| Know how to apply Shapelets method with Python | By learning the open source, I found the Python package *pyts* and carefully read the official documents. And I used this package to analyse the Gunman dataset. Besides, based on the codes in Kaggle, I could write the codes step by step without Python packages. | 100% |  |
| Apply Shapelets method in financial time series analysis | I used shapelet methods to predict the price of several stocks and indexes and compared the results with other method such as ARIMA model. | 100% |  |