**Report Form on (Master’s/Doctor’s) Thesis Writing Progress**

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| Chinese name | 安多 | Student ID No. | 2019280016 |
| Supervisor’s name | 谢小磊 | Associate supervisor |  |
| Thesis title | Using every country’s COVID-19 data to create a composite index ranking their relative attractiveness for geographic supply chain diversification to combat the risk of a future pandemic outbreak. | | |
| Date of thesis proposal defense |  |  | |
| Expected final thesis defense date | Date of this form | November 22, 2020 | |
| Schedule of thesis writing: *Research Work – Metric Generation* | | | |
| Whether proceed as planned: *On Schedule* | |  | |
| The current progress:  To date, the data collection, organization, and cleaning code has been completed. Additionally, the outlier removal and data smoothening code has been completed. | | | |
| Problems and solutions:  The first iteration of the peak finding code, although initially promising, was not as accurate as it needed to be. Limitation in existing peak finding approaches has necessitated the creation of a custom algorithm. The initial test of the second iteration of the peak finding algorithm appear promising and utilize further data smoothening and identification techniques to improve on the first iteration. | | | |
| Research progress report:  Overall, the research is right on schedule. I anticipated that the peak finding algorithm was going to be the most difficult step in the modeling process and planned accordingly. Once it is completed, the advanced metrics can begin to be calculated. | | | |
| Plan of next step:  I will further develop the peak finding algorithm. Upon its completion, I can immediately begin writing the metric generation code which will signify the first results of the research. | | | |
| Supervisor’s/ The Training Committee’s comment: | | Signature: | |