

Singapore Advisor: Sentiment Mining on Singapore Tourist Attractions

Group14

Source code and dataset link:

<https://drive.google.com/drive/folders/1DWtrHLFeI81Alm6rKhT0KR-kfB29SbCQ?usp=sharing>

Full dataset, code, and logs:

https://drive.google.com/drive/folders/1m5FDUbcdSaAfBr0Dhf82nh7PIE6caPgh?usp=share_link

Frontend github link:

<https://github.com/OYRay/review-app.git>

Demo video (full resolution):

https://drive.google.com/file/d/1CoOdmXqqphmQ7jCGQHYhawpxFuH0QieB/view?usp=share_link

| Folder/File Name | Folder/File Contents |
|--|--|
| github link.txt | frontend and executable system code |
| Raw_Data folder | raw reviews we crawled from Tripadvisor website. |
| Machine Learning Based Overall Sentiment Mining folder | Text-processing & feature extraction folder and ML model folder which contains python codes and final results in csv files. |
| Overall_Sentiment folder | The ensemble ratings aggregating ML and DL model results for each amusement |
| Deep Learning Based Overall Sentiment Mining folder | Ipython Notebook containing Bert fine tuning code, pickle file for focal loss class weights, saved bert tokenizer, saved best bert model |
| Aspect Term Extraction | Ipython notebook containing code for Dimension Reduction, Clustering and Topic Modelling, final aspect generation per amusement |
| Aspect_Based_Sentiment folder | Ipython notebook containing code and logs for Aspect-Based Sentiment Analysis. Dataset for ABSA model training. And saved model. |
| 20_places.xlsx | 20 places selected for the purpose of this project. |
| aspects.xlsx | summarized aspect and aspect terms |
| Review_Analysis folder | code for review analysis task |
| demo.mov | demo video for our system including Chatbot |