Teaching Performance Evaluation

Akshaya S Nadh[1] and Sindhu Daniel[2]

Student, Department of computer Applications[1]
Assistant Professor, Department of computer Applications[2]
Musaliar College of Engineering and Technology, Pathanamthitta, Kerala, India

Abstract: *Student's feedback is crucial for academic institutions in order to evaluate faculty performance. Handling the qualitative opinions of students efficiently while automatic report generation is a challenging task. Indeed, most of the organizations deal with quantitative feedback effectively, whereas qualitative feedback is either processed manually or ignored altogether. This research proposes a supervised aspect based opinion mining system based on two layered LSTM model. The first layer predicts the aspects described within the feedback and later specifies the orientation (positive, negative, neutral) of those predicted aspects. The model was tested on a manually tagged data set constructed from the last five years students' comments from Sukkur IBA University as well as on a standard SemEval-2014 data set. Unlike many other LSTM models proposed for other domains, the proposed model is quite simple in terms of architecture which results in less complexity. The system attains good accuracy using the domain embedding layer in both tasks: aspect extraction (91%) and sentiment polarity detection (93%). To the best of our knowledge, this study is a first attempt that uses deep learning approach for performing aspect based sentiment analysis on students' feedback for evaluating faculty teaching performance.*

Keywords: Aspect Extraction, Deep Learning, Long Short Term Memory Network ,Opinion Mining, Polarity Detection, Student Feedback

REFERENCES

[1] Y. Ma, H. Peng, T. Khan, E. Cambria, and A. Hussain, ''Sentic LSTM: a Hybrid Network for Targeted Aspect−Based Sentiment Analysis,'' Cognitive Computation, vol. 10, no. 4, pp. 639−650, 2018

[2] B.Wang, and M.Liu, "Deep learning for aspect-based sentiment analysis". Stanford University report, pp. 1−9,2018.

[3] A.Kumar and R.Jain, "Faculty Evaluation System", Procedia Computer Science, 125, pp.533−541, 2018.

[4] L. M. Rojas−Barahona, ''Deep learning for sentiment analysis,'' Language and Linguistics Compass, vol. 10, no. 12, pp. 701−719, 2019.

Copyright to IJARSCT
www.ijarsct.co.in

DOI: 10.48175/568

ISSN
2581-9429
IJARSCT

87