

CS794-CS892 Final Year Project Synopsis

Team Number	48
Group Members	AtharvaShrikant, DeboleenaChanda
Project Mentor	Sukanya Mukherjee
Project Title	Opinion Spam Detection: Detecting Fake Online Reviews

Objective

To implement a fake review detection of products in online shopping sites using machine learning techniques and opinion mining.

- To protect user from misleading reviews.
- To improve the shopping of genuine products online.
- Filter out the fake reviews.

Scope

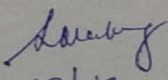
- Eradicate the problem of spamming undeserving positive opinions to some target entities in order to promote the entities and/or by giving false negative opinions to some other entities in order to damage their reputations.
- Improve decision making of buyers as the opinions on the web are increasingly relying on the products reviews.
- Opinion Spamming is getting worse and have major impacts on both producer and consumer.
- Detecting spam reviews or opinions will become more and more critical.

Plan

- Project Synopsis by Sept 5th, 2017.
- Background Study and Data Exploration by October 15th, 2017.
- Implementation of existing algorithm and proposal of new idea by November 30th, 2017.
- Implementation and testing of new algorithm by February 10th, 2018.
- Interim Report and Presentation by March 30th, 2018.
- Draft paper submission by April 10th, 2018.
- Reviews and re-work by May 1st, 2018.
- Final Report and Presentation by May 20th, 2018.

References

- Nitin Jindal and Bing Liu. "[Review Spam Detection](#)." Proceedings of WWW-2007 (poster paper), May 8-12, Banff, Canada.
- Nitin Jindal and Bing Liu. "[Opinion Spam and Analysis](#)." Proceedings of First ACM International Conference on Web Search and Data Mining (WSDM-2008), Feb 11-12, 2008, Stanford University, Stanford, California, USA.
- Ee-Peng Lim, Viet-An Nguyen, Nitin Jindal, Bing Liu and HadyLauw. "[Detecting Product Review Spammers using Rating Behaviors](#)." Proceedings of the 19th ACM International Conference on Information and Knowledge Management (CIKM-2010, full paper), Toronto, Canada, Oct 26 - 30, 2010.
- Guan Wang, SihongXie, Bing Liu, Philip S. Yu. [Identify Online Store Review Spammers via Social Review Graph](#). ACM Transactions on Intelligent Systems and Technology, accepted for publication, 2011.
- <https://www.cs.uic.edu/~liub/FBS/Sentiment-Analysis-tutorial-AAAI-2011.pdf>
- <https://www.cs.uic.edu/~liub/FBS/SentimentAnalysis-and-OpinionMining.pdf>
- <https://dzone.com/articles/opinion-mining-python-implementation>

Mentor's Endorsement Signature and Date	 5/9/17
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