**SUMMARY**

Collaborative Filtering Algorithm is a recommender system for filtering unnecessary contents out of vast useful or un useful data based on past information gathered using an efficient search algorithm in other to predict users need. Collaborative filtering is a method of making automatic predictions (filtering) about the interests of a user by collecting preferences or taste information from many users (collaborating). The procedure involves in achieving the Collaborative Filtering Algorithm is a simple analogy of using several means to achieve something better than good result under different circumstances base on the environment requirement.

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**REFERENCES**

"Facebook, Pandora Lead Rise of Recommendation Engines - TIME", *TIME.com*. 27 May 2010. Retrieved 1 June 2015.

Alexander Felfernig, Klaus Isak, Kalman Szabo, Peter Zachar, The VITA Financial Services Sales Support, in AAAI/IAAI 2007, pp. 1692-1699, Vancouver, Canada, 2007.

*R. J. Mooney & L. Roy (1999). Content-based book recommendation using learning for text categorization*. In Workshop Recom. Sys.: Algo. and Evaluation.

Elahi (https://www.linkedin.com/in/mehdielahi), Mehdi; Ricci, Francesco; Rubens, Neil. *A survey of active learning in collaborative filtering recommender systems* . Computer Science Review, 2016, Elsevier.

Francesco Ricci and Lior Rokach and Bracha Shapira, Introduction to Recommender Systems Handbook, Springer, 2011, pp. 1-35

H. Chen, A. G. Ororbia II, C. L. Giles ExpertSeer: a Keyphrase Based Expert Recommender for Digital Libraries, in arXiv preprint 2015

Hosein Jafarkarimi; A.T.H. Sim and R. Saadatdoost A Naïve Recommendation Model for Large Databases, International Journal of Information and Education in ACM/IEEE Joint Conference on Digital Libraries (JCDL) 2011

Pankaj Gupta, Ashish Goel, Jimmy Lin, Aneesh Sharma, Dong Wang, and Reza Bosagh Zadeh WTF:The who-to-follow system at Twitter, Proceedings of the 22nd international conference on World Wide Web

Prem Melville and Vikas Sindhwani, Recommender Systems, Encyclopedia of Machine Learning, 2010.

Rubens, Neil, Sugiyama, Masashi; Kaplan, Dain (2016). "Active Learning in Recommender Systems" .In Ricci, Francesco; Rokach, Lior; Shapira, Bracha. *Recommender Systems Handbook* Springer US. ISBN 978-1-4899-76376. Technology, June 2012