[Trust in Recommender Systems: A deep learning perspective](https://arxiv.org/pdf/2004.03774.pdf) (Feb 2020)

There are various recommendation systems built on various state if the art techniques. But the significant problem with these systems are that users may not trust recommender system for multiple reasons like lack of explanation or inaccurate recommendation results.

Thus, we need to have a trust associated with this recommender system with which people can be able to embrace trustworthy recommenders. These ‘**trustworthy’** metric should consider how the recommender is able to leverage social relationship of user, how recommender is able to weed out noises, spams, how is recommender able to explain why it recommended those specific items.

Article aims to survey and explain about how authors have tried to achieve.

Brief outline of the article:

* Robustness:
  + Shilling Attack Detection
  + Deep learning-based Shilling attack detection
  + Generalized noises
  + Adversial noises
* Explain ability of recommendation system
  + Explanation of collaborative filtering
  + Explanation of textual data
  + Explanation if Visual Data
* Social Awareness
  + Auto Encoder based methods
  + Using reconstructed input for recommendation
  + Latent Representation for recommendation
  + RNN, GNN based models
  + Hybrid Methods

Link to paper : - https://arxiv.org/pdf/2004.03774.pdf