

Review of: "Strategic Citations in Patents: Analysis Using Machine Learning"

Dr. Sumit Kumar Banshal¹

¹ Alliance University

Potential competing interests: No potential competing interests to declare.

The contributions of this paper are:

- The use of patent abstract texts to measure proximity in ideas expressed in patent text.
- The use of unsupervised machine learning algorithm Doc2Vec to construct a measure of similarity across patent texts.
- The uncovering of potential strategic biases in inventors' citation patterns, such as omitting citations to patents in different cities and citing their own prior inventions less after changing firms.
- The implication that the use of patent citations as a measure of knowledge flows may be affected by these strategic biases.

There are a few limitations of this paper, which include:

- The use of patent abstract texts instead of full patent texts may limit the accuracy of the measure of similarity across patent texts.
- The focus on US patents may limit the generalizability of the findings to other countries.
- The potential for other unobserved factors to influence inventors' citation patterns, which were not accounted for in the analysis.
- The lack of consideration for the quality of the patents cited, which may affect the validity of the measure of knowledge relatedness across patents.