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Date: Sep 16th

Paper Title: Wu\_EJMR\_paper Author Names: Alice H Wu

Year Published: 2017

### **Open questions:**

To what extent can we tell that this study reflects the general STEM society regarding its portrayal of female members?

If the similar study was conducted in a different STEM field (Engineering instead of Economic), would it differ greatly or not? If so, can that be used to cross validate with this research (EJMR)?

### The topic areas covered by the paper are:

Implementing text mining, machine learning and econometrics to study whether there exists an uneven academic portrayal and judgment on women in online conversations and posts in professional economist forums. Selection on Data from EJMR, Analysis on gender-related posts/threads using various training methods and classification.

# The previous approaches to this problem were:

Whether or not the stereotype on women in STEM (in professional economic discipline, specifically in this paper) has not been studied thoroughly or transparently because, if a question is asked in a formal setting, the answer is most likely not to reflect one's honest intention. Therefore, the issue was merely just mentioned, but researched or studied with reliable accuracy.

## Outline the basic new approach or approaches to this problem:

The author picks an online platform to gather the data and perform analysis on, knowing that anonymousness that is guaranteed in an online setting will remove the 'social-mask' that one might put on in a formal setting, consequently ensuring that the data taken is the most accurate portrayal of the raw nature of STEM society.

### Critical assumptions made include:

There clearly exists a difference on the topic of a post or a thread (inclined toward Personal/Physical) when the post is female- gendered. The vocabulary of the female- gender post or thread is far more likely to be inappropriate and less professional than those on male-gender post.

These, with other analysis made throughout the paper, conclusively shows that the women in EJMR (specifically, but in general - in STEM) do remain as minority and are subject to disproportionate attention.

#### The performance of the techniques discussed in the paper was measured in what manner:

She continuously points out what the possible error could be in the previous method of analyzation, and backs up with revised approached (whether to perform test on multiple subsets, eliminating or adding vocabularies that might result in deviation), diving the training to 4 different levels to increase the accuracy of the training. Examined the characteristics of post/thread in multiple angles such as vocabulary (female and male)/ vocabulary (profession/personal) / popularity/ profile of the economist on the forum/ ensuring that the analysis is not drawn from a single perspective, but from features that encompass the entire nature of the forum.

### What background techniques are used in the paper that you are not familiar with:

- 1. 'Popularity on Thread on Gender ('computing Popularity')'
- 2. 'Difference-in-Difference Analysis of Gender on Attention ('Difference-in-Difference')
- 3. Along with a handful of details illustrated throughout the paper.

# The following terms were defined:

- 1. 'Academic/ Profession' / 'Personal/Physical'
- 2. 'Open vocabulary strategy'
- 3. 'Gender Classifiers'
- 4. 'Lasso Regulation'
- 5. 'Popularity'
- 6. 'State dependence in Topics ('state- dependent')

### I rate and justify the value of this paper as:

This paper is ultimately original - revealing a truth that everyone experiences to some extent but never could numerically outline it due to numerous limitations and implied slienceness. No problem can be solved without knowing what the problem is or denying the existence of the problem. This paper states number to number, line to line what the problem is so that no one is able to dismiss the issue, with her thorough and quiet extensive analysis. It might not be a perfect nor wholesome analysis on the entire STEM society since admittedly it is on a single online forum, but the level of computation/analysis and the idea to carry out the research should be highly regarded.