GenderedNews – PhD proposal (EN)

2020-05-15

Université Grenoble Alpes is advertising a fully-funded PhD student position (3 years) starting in October 2020 to contribute to the GenderedNews project.

The GenderedNews Project

The GenderedNews project aims to propose new methods for measuring and explaining the level of gender bias in the news media in France. These can be defined as the fact that the news media tend on the one hand to overweight men compared to women in terms of mentions and quotes, and on the other hand to attribute to women a specific social role often involving, among other things, anonymity, a reduced capacity for action in society and the confusion between this action and their marital or family status. Numerous empirical studies have proven the existence of these biases and have made it possible to better understand them on an international scale.

However, research on this issue is often based on data limited in volume and produced by NGOs, administrations or media regulatory bodies. They generally give rise to manual content analyzes that do not allow systematic account of changes in sexist biases in the media over the long term and on a large number of sources, nor explain these biases in terms of variables such as media funding, size of newsrooms or other organizational variables.

The GenderedNews project aims to provide and analyze large and stable data sources over time as well as explore new methods for documenting gender bias in the media. It is based on a collaborative research scheme between a media sociologist and a computer scientist with skills in media studies, gender studies, natural language processing and digital data collection. It also has an important partnership dimension, with leading media being associated and providing access to data.

The PhD : sourcing biases in the production of gender imbalance in the news

GenderedNews focuses on two kinds of biases and two different measures of those biases. Sampling biases occur through the selection of a biased sample of people mentioned in the media. They can be studied by merely counting how many men and women access to public visibility on one side and by studying the framing patterns of the pictured men and women on the other side. Sourcing biases occur through the selection of a biased sample of people who, in addition to be visible, are allowed to express their views in the media. They can also be studied using the two approaches : counting how many on one side and analysing how on the other.

Within the project, the PhD student will contribute more specifically to the study of sourcing biases. This will involve the following tasks and research operations :

- Data analysis : the large datasets already constituted will be used to measure sourcing biases in the news. The PhD student will notably use text mining and NLP methods to a) identify named entities within the corpus, b) identify source citation patterns within texts and c) label named entities according to their gender (based on first names and gender-specific terms). These tasks will then make multivariate analyzes possible to explain the level of gender diversity achieved in the various media analyzed according to sociological variables (for example, it will be possible to measure the effect of an increase in the proportion of women in newsrooms on gender bias in content or the effect of a decrease in the number of journalists).

- Interviews : the hired PhD will also carry on a qualitative research on the origin of possible gender biases in the partners' organizations. A first set of enquiries will focus on checking that the methods used to access media content do not bias the results. Interviews will be conducted with the technical teams responsible for the functionning of the API at the partner media in order to better understand how those pipelines function and to identify possible biases. A second set of enquiries will focus on understanding the hierarchy of information in those media and its possible influence on gender biases. Interviews will be conducted with journalists and editors to understand what makes a piece of news newsworthy and how the media takes into account gender issues in so doing. The aim of these interviews will be to understand how the media as an organization controls for gender biases in its daily operations.
- On a theoretical level, this PhD thesis will answer some questions that were previously left in the shadows. These include notably the definition and operational measurement of « diversity » in the news in relation with gender issues for the social science community and also the the issue of bias and fairness in machine learning algorithms for the NLP community.

In addition to the thesis and scientific publications the PhD student will also be involved in the GenderedNews project at different levels :

- Supervising data collection and processing from the partner media ;
- Contributing to the production of new measure and visualization tools of content & sources diversity in the media ;
- Contributing to the dissemination of the results to the general public on a website serving as a platform to promote a more diverse approach to the news.

Scientific environment

The PhD will be conducted as a joint research project of the Regulations team of Pacte research lab (https://www.pacte-grenoble.fr/page/regulations) and of the Getalp team of LIG lab (http://www.liglab.fr/en/research/research-areas-and-teams/getalp). The recruited studend will be mostly hosted at Pacte research laboratory for everyday support and partly at LIG. The PhD will also benefit from the support of the Data Institute project on social media and social science (https://data-institute.univ-grenoble-alpes.fr/research/data-science-social-media-and-social-sciences/) and of the Algorithmic Society Chair of MIAI that fosters research based on the collaboration of social and computer scientists to contribute to a better understanding of the functioning of algorithms and a critical assessment of the effects of AI in society (https://algorithmicsociety.github.io/).

How to apply ?

Applicants must hold a Master's degree in Social Science or in Natural Language Processing (or be about to earn one). They are ideally expected to have a strong expertise in social science methods and a good knowledge of text mining and language processing methods. They also need to have a very good knowledge of french and english languages to be able to process text data in these two languages and conduct interviews mostly in french.

Applications are expected before July 1st, 2020 and should be sent to Gilles Bastin at gilles.bastin@iepg.fr and François Portet at Francois.Portet@imag.fr.
Applicants should attach :
– an application letter explaining why the consider themselves able to carry on this PhD project,
– their last diploma,
– a CV.
They can also add recommendation letters.
The selection committee will inform applicants of its decision before July, 15th, 2020.

If you have any further questions about the position and the project, please contact Gilles Bastin and/or François Portet.