

# LT-EDI 2022 shared tasks

## SECOND WORKSHOP ON LANGUAGE TECHNOLOGY FOR EQUALITY, DIVERSITY, INCLUSION

### First tasks of these kinds

*"Our focus is on creating LT that will be more inclusive of gender, racial, sexual orientation, persons with disability. We plan to create speech and language technology to address EDI not only in English, but also in less resourced languages such as Bhojpuri, Cebuano, Irish, Javanese, Tamil, Welsh, and Zulu etc."*

how similar are the phenomena, the targeted populations?

### Homophobia/Transphobia Detection in social media comments

#### Description

Participants will be provided with sentences in comment, extracted from social. Given a comments, a system must predict whether or not it contains any form of homophobia/transphobia.

#### Dataset

##### Dataset for Identification of Homophobia and Transphobia in Multilingual YouTube Comments

The increased proliferation of abusive content on social media platforms has a negative impact on online users. The dread, dislike, discomfort, or mistrust of lesbian, gay, transgender or bisexual persons is defined as homophobia/transphobia. Homophobic/transphobic speech is a type of offensive language that may be summarized as hate speech directed toward LGBT+ people, and it has been a growing concern in recent years. Online homophobia/transphobia is a severe societal problem that can make online platforms poisonous and unwelcome to LGBT+ people while also attempting to eliminate equality, diversity, and inclusion. We provide a new hierarchical taxonomy for online homophobia and transphobia, as well as an expert-labelled dataset that will allow homophobic/transphobic content to be automatically identified. We educated annotators and supplied them with comprehensive annotation rules because this is a sensitive issue, and we previously discovered that untrained crowdsourcing annotators struggle with diagnosing homophobia due to cultural and other prejudices. The dataset comprises 15,141 annotated multilingual comments.

-> English, Tamil, Tamil-English

## Important Dates

- Task announcement: Nov 20, 2021
- Release of Training data: Nov 20, 2021
- Release of Test data: Jan 14, 2022
- Run submission deadline: Jan 30, 2022
- Results declared: Feb 10, 2022
- **Paper submission: March 10, 2022**
- Peer review notification: March 26, 2022
- Camera-ready paper due: April 5, 2022
- Workshop Dates: May 26-28, 2022

## Evaluation

Macro averaged Precision, macro averaged Recall and macro averaged F-Score across all the classes, with Sklearn classification report

*Baseline from the paper:* Accuracy ranges between 0.63 to 0.94 for 3-class English; for Tamil, from 0.61 to 0.92 for 3-class labels

*IDEA: Per il paper, potremmo ampliare le metriche di valutazione verso misure di Fairness*

## Approach

The **pre-processing techniques**, namely removal of punctuation, stop words and tags, were applied to clean the data. We divided the corpora using a **stratified sampling strategy with K-folds** to split the dataset into groups, and each group contains exactly the same percentage of labels. We used stratified sampling since our dataset is imbalanced. We split the data into five folds for cross-validation.

The models are grouped into three categories, namely:

- (1) **Machine learning models with linguistic features** -> logistic regression, naive Bayes, random forest, support vector machines and decision trees (for the linguistic features, n-grams with n are equal to 3 are used, and the text is vectorized using TF-IDF and count vectorizer)
- (2) **Machine learning models with word embeddings** -> same as 1 but the texts are vectorized using a word embedding features from BERT and FastText
- (3) **Deep learning models** -> Bi-LSTM and MBERT

From our experiment results, **hybrid deep learning and machine learning worked better than pure machine learning or deep learning**. The class imbalance also affected the performance of our classifiers.

*Esplorare il Git dell'autore: <https://github.com/bharathichezhiyan> (Propone degli approcci per code-mixed textual data)*

The low scores in Tamil-English are due to the problem of code-mixing at different levels. Even-though we trained our systems with multilingual settings, the code-mixing in our dataset is unpredictable, there is no standard spelling when social media users try to write Tamil Roman script, and the dialectal variants influence the morphology changes code-mixed words.

## Hope Speech Detection for Equality, Diversity and Inclusion

### Description

Hope is considered significant for the well-being, recuperation and restoration of human life by health professionals. Hope speech reflects the belief that one can discover pathways to one's desired objectives and become motivated to utilize those pathways. Our work aims to change the prevalent way of thinking by moving away from a preoccupation with discrimination, loneliness or the worst things in life to building confidence, support and good qualities based on comments by individuals. This dataset also has class imbalance problems depicting real-world scenarios.

### Dataset

#### HopeEDI: A Multilingual Hope Speech Detection Dataset for Equality, Diversity, and Inclusion

Over the past few years, systems have been developed to control online content and eliminate abusive, offensive or hate speech content. However, people in power sometimes misuse this form of censorship to obstruct the democratic right of freedom of speech. Therefore, it is imperative that research should take a positive reinforcement approach towards online content that is encouraging, positive and supportive contents. Until now, most studies have focused on solving this problem of negativity in the English language, though the problem is much more than just harmful content. Furthermore, it is multilingual as well. Thus, we have constructed a Hope Speech dataset for Equality, Diversity and Inclusion (HopeEDI) containing user-generated comments from the social media platform YouTube with 28,451, 20,198 and 10,705 comments in English, Tamil and Malayalam, respectively, manually labelled as containing hope speech or not. To our knowledge, this is the first research of its kind to annotate hope speech for equality, diversity and inclusion in a multilingual setting. We hope that this resource will spur further research on encouraging inclusive and responsive speech that reinforces positiveness.

-> Youtube comments in English, Kannada, Malayalam, Spanish, and Tamil The Spanish HS dataset consists of LGBITQ-related tweets that were collected using the Twitter API (June 27, 2021 to July26, 2021). As seed for the search we used a lexicon of LGBITQ-related

terms, such as #OrgulloLGTBI or #LGTB. A tweet is marked as **Hope Speech** (HS) if the text: **i)** it explicitly supports the social integration of minorities; **ii)** it is a positive inspiration for the LGBTQ community; **iii)** it explicitly encourages LGBTQ people who might find themselves in a situation; **iv)** it unconditionally promotes tolerance. A tweet is marked as **Non Hope Speech** (NHS) if the text: **i)** it expresses negative sentiment towards the LGBTQ community; **ii)** it explicitly seeks violence; **iii)** it uses gender-based insults.

Important Dates

Same as before

Evaluation

Same as before

*Last year results for English:*

📄 English\_Results\_Hope Speech Detection.pdf

*Last year proceedings:* <https://aclanthology.org/2021.ltedi-1.0.pdf>