



**Ahmedabad**  
**University**

# **CSE 523 Machine Learning**

**Progress Report:**

## **Toxic Comments Classification**

**Group Details:**

**NaN-Prediction Pending**

<b>Sr. No.</b>	<b>Name</b>	<b>Enrollment Number</b>
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## Tasks performed in the week:

- We observed the model performances while changing the dimensions within feature selection using eigenvalues.
- Hyper parameter fine tuning of all the linear and non- linear classifiers, including varying and cross validating different numbers of eigenvalues.
- Changed the dimension of input data and use of different matrices for dimension reduction.

## Outcomes of the tasks performed:

- We were able to find out the optimum parameters for efficient model functioning.
- We learned about the relationship between the features and the classifiers and observed how sensitive they were

## Tasks to be performed in the upcoming week:

- We would now be exploring other methods of dimensionality reduction than already used and observe how it affects the overall performance.

## References:

1. <https://www.kaggle.com/c/jigsaw-toxic-comment-classification-challenge/data>
2. <https://smltar.com/>
3. <https://www.tidytextmining.com/tidytext.html>
4. <https://arxiv.org/ftp/arxiv/papers/1903/1903.06765.pdf>