# **Project: Toxic comment classification**

#### Task

You are provided with a large number of comments which have been labeled by human raters for toxic behavior. The types of toxicity are:

- toxic
- severe\_toxic
- obscene
- threat
- insult
- identity\_hate

You must create a model which predicts a probability of each type of toxicity for each comment.

## File descriptions

- **train.csv** the training set, contains comments with their binary labels
- **test.csv** the test set, you must predict the toxicity probabilities for these comments. To deter hand labeling, the test set contains some comments which are not included in scoring.
- **sample\_submission.csv** a sample submission file in the correct format

### **Submission File**

For each id in the test set, you must predict a probability for each of the six possible types of comment toxicity (toxic, severe\_toxic, obscene, threat, insult, identity\_hate). The columns must be in the same order as shown below. The file should contain a header and have the following format:

```
id, toxic, severe_toxic, obscene, threat, insult, identity_hate
00001cee341fdb12, 0.5, 0.5, 0.5, 0.5, 0.5
0000247867823ef7, 0.5, 0.5, 0.5, 0.5, 0.5
etc.
```

### **Evaluation**

Submissions are evaluated on the mean column-wise ROC AUC. In other words, the score is the average of the individual AUCs of each predicted column.