



Toxic Comment Classification using Deep Learning.

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ABSTRACT

Over a decade, social networking and social media have been growing in leaps and bounds. Today, people can express themselves and their opinions and also discuss with others via these platforms. In such a scenario, it is quite obvious that debates may arise due to differences in opinion. But often these debates take a dirty side and may result in fights over social media during which offensive language termed as toxic comments may be used from one side. These toxic comments may be threatening, obscene, insulting or identity-based hatred. So, these pose the threat of abuse and harassment online. To tackle the above-mentioned problem, we have developed a Toxic Comment Classification System using Deep Learning. The system is designed to detect and classify toxic comments or texts while chatting. It helps people refrain from using negative or profane language while interacting with others and promote healthy conversation among users.

Keywords: Toxic Comment Classification, Machine learning, Deep Learning, Derogatory Comments

1. INTRODUCTION:

In social media, anyone is free to post their ideas and views while not declaring his/her identity. Detection of Hate Speech, Offensive language and utterance employed by social media users became one in every of the foremost challenges of this case. Social media users were being targeted by Hate Speech and Offensive language like abusive, hurtful, disparaging or unlawful user-generated content by some mischievous users. These on-line platforms offer academic degree open place to debate and treat totally different matters however abusive comments and on-line violence on people have turned this into an awfully necessary social issue. As a result of the misuse of on-line interactions, an outsized range of people have fallen into depression, anxiety, and alternative psychological state issues.

1.1 Common Machine Learning Algorithms for Toxic Comment Classification System:

Logistic Regression: Logistic regression is a foundational algorithm used for binary classification tasks. In the context of Toxic Comment Classification, Logistic Regression can classify comments into two categories: toxic or non-toxic. By assigning a probability score to each comment, it provides a decision boundary that helps classify the comment accordingly. For new comments, the model predicts the probability of the comment being toxic. A threshold (e.g., 0.5) is used to classify the comment based on this probability.

Decision Trees: Decision trees construct a model that splits the data based on feature values to make decisions. They are straightforward to understand and visualize, making them useful for exploring how different features contribute to the classification of comments as toxic or not. However, they can be prone to overfitting, especially with complex datasets.

2. Literature Survey

Title: " Challenges for Toxic Comment Classification: An In-Depth Error Analysis "

Year: 2023

Author: Betty van Aken, Julian Risch, Ralf Krestel and Alexander Loser.

Title: " Toxic Comment Classification "

Year: 2022

Author: Pallam Ravi, Hari Narayana Batta, Greeshma S, Shaik Yaseen.

3. Requirements:

3.1.1 Hardware Requirements:

1. CPU: Intel Core i3 or higher
2. RAM: 8 GB minimum; 16 GB recommended
3. Storage: 256 GB SSD or more
4. ROM: 100GB or higher

3.1.2 Software Requirements:

1. OS: Windows 10/11, macOS, or Linux
2. Python: 3.8 or higher
3. Sublime Text Editor: It is a sophisticated text editor used primarily for coding, markup, and prose.
4. XAMP Server: It is a popular open-source software package that provides an easy-to-install, cross-platform solution for setting up a web server.

4. System Analysis and Design

4.1 Modules

1. **Data Collection:** Gather a dataset of comments or text data for training and testing the classification model.
2. **Data Preprocessing:** Clean and prepare the raw data for analysis and model training.
3. **Feature Extraction:** Transform text data into numerical features that can be used by machine learning models.
4. **Model Training:** Train a machine learning model to classify comments based on their toxicity.
5. **Model Evaluation:** Assess the performance of the trained model to ensure it meets accuracy and reliability requirements.
6. **Prediction and Inference:** Use the trained model to classify new comments as toxic or non-toxic.

4.2 Architecture

The architecture of a Toxic Comment Classification System using Deep Learning technologies typically involves several key components, working together to identify and mitigate toxic comments. At the core, the system relies on a robust data infrastructure capable of handling large volumes of comments. This data undergoes extensive preprocessing to detect toxicity in the comments. Feature selection techniques are applied to extract relevant attributes that are indicative of toxic behavior.

5. Conclusion

The research aimed to assess the efficiency of offensive language identification in terms of specificity, accuracy, and recall. In this study, we contrasted specific supervised Decision Tree machine learning algorithms to recognize offensive tweets on Twitter. It offers a fascinating look into how hate-mongers utilize trends in terms of how they convey hatred, sexism, and misinformation. The experimental findings indicate that for the aggressive tweets analysis, the classifiers produced stronger outcomes with the decision tree solution providing more than 90 percent precision and outperforming other algorithms.

6. Source code

```
-- phpMyAdmin SQL Dump
-- version 4.0.4
-- http://www.phpmyadmin.net
-- Host: localhost
-- Generation Time: Sep 12, 2022 at 11:46 AM
-- Server version: 5.6.12-log
```

```

-- PHP Version: 5.4.16
SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
SET time_zone = "+00:00";

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8 */;

-- Database:
privacy_preserving_federated_depression_detection
CREATE DATABASE IF NOT EXISTS
privacy_preserving_federated_depression_detection
DEFAULT CHARACTER SET latin1 COLLATE latin1_swedish_ci;
USE
privacy_preserving_federated_depression_detection;

-- Table structure for table auth_group
--
CREATE TABLE IF NOT EXISTS auth_group (
  id int(11) NOT NULL AUTO_INCREMENT,
  name varchar(80) NOT NULL,
  PRIMARY KEY (id),
  UNIQUE KEY name (name)
) ENGINE=InnoDB DEFAULT CHARSET=latin1 AUTO_INCREMENT=1 ;

-----

--
-- Table structure for table
auth_group_permissions
--
CREATE TABLE IF NOT EXISTS
auth_group_permissions (
  id int(11) NOT NULL AUTO_INCREMENT,
  group_id int(11) NOT NULL,
  permission_id int(11) NOT NULL,
  PRIMARY KEY (id),
  UNIQUE KEY
auth_group_permissions_group_id_permission_id_0cd325b0_uniq (group_id,permission_id),
  KEY
auth_group_permissio_permission_id_84c5c92e_fk_auth_perm (permission_id)
) ENGINE=InnoDB DEFAULT CHARSET=latin1 AUTO_INCREMENT=1 ;

-----

```

```
--  
-- Table structure for table auth_permission  
--  
CREATE TABLE IF NOT EXISTS  
auth_permission (  
  id int(11) NOT NULL AUTO_INCREMENT,  
  name varchar(255) NOT NULL,  
  content_type_id int(11) NOT NULL,  
  codename varchar(100) NOT NULL,  
  PRIMARY KEY (id),  
  UNIQUE KEY  
auth_permission_content_type_id_codename_01ab375a_uniq (content_type_id,codename)  
) ENGINE=InnoDB DEFAULT CHARSET=latin1  
AUTO_INCREMENT=28 ;  
--  
-- Dumping data for table auth_permission  
--  
INSERT INTO auth_permission (id, name, content_type_id, codename) VALUES  
(1, 'Can add log entry', 1, 'add_logentry'),  
(2, 'Can change log entry', 1, 'change_logentry'),  
(3, 'Can delete log entry', 1, 'delete_logentry'),  
(4, 'Can add permission', 2, 'add_permission'),  
(5, 'Can change permission', 2, 'change_permission'),  
(6, 'Can delete permission', 2, 'delete_permission'),  
(7, 'Can add group', 3, 'add_group'),  
(8, 'Can change group', 3, 'change_group'),  
(9, 'Can delete group', 3, 'delete_group'),  
(10, 'Can add user', 4, 'add_user'),  
(11, 'Can change user', 4, 'change_user'),  
(12, 'Can delete user', 4, 'delete_user'),  
(13, 'Can add content type', 5, 'add_contenttype'),  
(14, 'Can change content type', 5, 'change_contenttype'),  
(15, 'Can delete content type', 5, 'delete_contenttype'),  
(16, 'Can add session', 6, 'add_session'),  
(17, 'Can change session', 6, 'change_session'),  
(18, 'Can delete session', 6, 'delete_session'),  
(19, 'Can add client register_model', 7, 'add_clientregister_model'),  
(20, 'Can change client register_model', 7, 'change_clientregister_model'),  
(21, 'Can delete client register_model', 7, 'delete_clientregister_model'),
```

```

(22, 'Can add client posts_ model', 8, 'add_clientposts_model'),
(23, 'Can change client posts_ model', 8, 'change_clientposts_model'),
(24, 'Can delete client posts_ model', 8, 'delete_clientposts_model'),
(25, 'Can add feedbacks_ model', 9, 'add_feedbacks_model'),
(26, 'Can change feedbacks_ model', 9, 'change_feedbacks_model'),
(27, 'Can delete feedbacks_ model', 9, 'delete_feedbacks_model');
-----
--
-- Table structure for table auth_user
--
CREATE TABLE IF NOT EXISTS auth_user (
  id int(11) NOT NULL AUTO_INCREMENT,
  password varchar(128) NOT NULL,
  last_login datetime(6) DEFAULT NULL,
  is_superuser tinyint(1) NOT NULL,
  username varchar(150) NOT NULL,
  first_name varchar(30) NOT NULL,
  last_name varchar(150) NOT NULL,
  email varchar(254) NOT NULL,
  is_staff tinyint(1) NOT NULL,
  is_active tinyint(1) NOT NULL,
  date_joined datetime(6) NOT NULL,
  PRIMARY KEY (id),
  UNIQUE KEY username (username)
) ENGINE=InnoDB DEFAULT CHARSET=latin1
AUTO_INCREMENT=1 ;
-----
--
-- Table structure for table auth_user_groups
--
CREATE TABLE IF NOT EXISTS
auth_user_groups (
  id int(11) NOT NULL AUTO_INCREMENT,
  user_id int(11) NOT NULL,
  group_id int(11) NOT NULL,
  PRIMARY KEY (id),
  UNIQUE KEY
auth_user_groups_user_id_group_id_94350c0c_uniq (user_id,group_id),
  KEY

```

```
auth_user_groups_group_id_97559544_fk_auth_group_id (group_id)
) ENGINE=InnoDB DEFAULT CHARSET=latin1
AUTO_INCREMENT=1 ;
-----
--
-- Table structure for table auth_user_user_permissions
--
CREATE TABLE IF NOT EXISTS
auth_user_user_permissions (
  id int(11) NOT NULL AUTO_INCREMENT,
  user_id int(11) NOT NULL,
  permission_id int(11) NOT NULL,
  PRIMARY KEY (id),
  UNIQUE KEY
auth_user_user_permissions_user_id_permission_id_14a6b632_uniq (user_id,permission_id),
  KEY
auth_user_user_permi_permission_id_1fbb5f2c_fk_auth_perm (permission_id)
) ENGINE=InnoDB DEFAULT CHARSET=latin1
AUTO_INCREMENT=1 ;
-----
--
-- Table structure for table django_admin_log
--
CREATE TABLE IF NOT EXISTS
django_admin_log (
  id int(11) NOT NULL AUTO_INCREMENT,
  action_time datetime(6) NOT NULL,
  object_id longtext,
  object_repr varchar(200) NOT NULL,
  action_flag smallint(5) unsigned NOT NULL,
  change_message longtext NOT NULL,
  content_type_id int(11) DEFAULT NULL,
  user_id int(11) NOT NULL,
  PRIMARY KEY (id),
  KEY
django_admin_log_content_type_id_c4bce8eb_fk_django_co (content_type_id),
  KEY
django_admin_log_user_id_c564eba6_fk_auth_user_id (user_id)
) ENGINE=InnoDB DEFAULT CHARSET=latin1
```

```
AUTO_INCREMENT=1 ;
-----
--
-- Table structure for table django_content_type
--
CREATE TABLE IF NOT EXISTS
django_content_type (
  id int(11) NOT NULL AUTO_INCREMENT,
  app_label varchar(100) NOT NULL,
  model varchar(100) NOT NULL,
  PRIMARY KEY (id),
  UNIQUE KEY
django_content_type_app_label_model_76bd3d3b_uniq (app_label,model)
) ENGINE=InnoDB DEFAULT CHARSET=latin1
AUTO_INCREMENT=10 ;
--
-- Dumping data for table django_content_type
--
INSERT INTO django_content_type (id, app_label, model) VALUES
(1, 'admin', 'logentry'),
(3, 'auth', 'group'),
(2, 'auth', 'permission'),
(4, 'auth', 'user'),
(8, 'Client_Site', 'clientposts_model'),
(7, 'Client_Site', 'clientregister_model'),
(9, 'Client_Site', 'feedbacks_model'),
(5, 'contenttypes', 'contenttype'),
(6, 'sessions', 'session');
-----
--
-- Table structure for table django_migrations
--
CREATE TABLE IF NOT EXISTS
django_migrations (
  id int(11) NOT NULL AUTO_INCREMENT,
  app varchar(255) NOT NULL,
  name varchar(255) NOT NULL,
  applied datetime(6) NOT NULL,
  PRIMARY KEY (id)
```

```

) ENGINE=InnoDB DEFAULT CHARSET=latin1
AUTO_INCREMENT=22 ;
--
-- Dumping data for table django_migrations
--
INSERT INTO django_migrations (id, app, name, applied) VALUES
(1, 'Remote_User', '0001_initial', '2019-04-23 07:01:48.050781'),
(2, 'contenttypes', '0001_initial', '2019-04-23 07:01:49.494140'),
(3, 'auth', '0001_initial', '2019-04-23 07:02:03.837890'),
(4, 'admin', '0001_initial', '2019-04-23 07:02:05.832031'),
(5, 'admin', '0002_logentry_remove_auto_add', '2019-04-23 07:02:05.863281'),
(6, 'contenttypes', '0002_remove_content_type_name', '2019-04-23 07:02:07.041015'),
(7, 'auth', '0002_alter_permission_name_max_length', '2019-04-23 07:02:07.839843'),
(8, 'auth', '0003_alter_user_email_max_length', '2019-04-23 07:02:08.330078'),
(9, 'auth', '0004_alter_user_username_opts', '2019-04-23 07:02:08.361328'),
(10, 'auth', '0005_alter_user_last_login_null', '2019-04-23 07:02:08.921875'),
(11, 'auth', '0006_require_contenttypes_0002', '2019-04-23 07:02:08.953125'),
(12, 'auth', '0007_alter_validators_add_error_messages', '2019-04-23 07:02:08.989257'),
(13, 'auth', '0008_alter_user_username_max_length', '2019-04-23 07:02:09.785156'),
(14, 'auth', '0009_alter_user_last_name_max_length', '2019-04-23 07:02:10.580078'),
(15, 'sessions', '0001_initial', '2019-04-23 07:02:11.764648'),
(16, 'Remote_User', '0002_clientposts_model', '2019-04-25 05:53:57.702132'),
(17, 'Remote_User', '0003_clientposts_model_usefulcounts', '2019-04-25 10:00:02.521468'),
(18, 'Remote_User', '0004_auto_20190429_1027', '2019-04-29 04:57:32.672296'),
(19, 'Remote_User', '0005_clientposts_model_dislikes', '2019-04-29 05:15:16.668390'),
(20, 'Remote_User', '0006_Review_model', '2019-04-29 05:19:26.382257'),
(21, 'Remote_User', '0007_clientposts_model_names', '2019-04-30 04:45:46.472656');
-- -----
--
-- Table structure for table django_session
--
CREATE TABLE IF NOT EXISTS
django_session (
  session_key varchar(40) NOT NULL,
  session_data longtext NOT NULL,
  expire_date datetime(6) NOT NULL,
  PRIMARY KEY (session_key),
  KEY django_session_expire_date_a5c62663 (expire_date)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

```


--

-- Dumping data for table django_session

--

INSERT INTO django_session (session_key, session_data, expire_date) VALUES

('0jpcgnd1gmwbp3e8tw54e6nxjylsogyo',
'YmM4NjE0MDQ2MzBmYWlXNzIzNTkxZjBiNi2I5M2MxMzQyYTE0YmMxODp7InVzZXJpZCI6Mn0=', '2020-02-21 08:52:28.687500'),
('vta7rwx24d6ggrawen90jqmn6ydwf50', 'eyJ1c2VyaWQiOjF9:1oXgQD:U4ja0U6GsMIQBMAM5r9a_cLBVoSkO21pVXo_Pt4SRBc', '2022-09-26 10:12:09.358685'),
('14z63ouq423azof04qz2cl91ytthlv', 'eyJ1c2VyaWQiOjF9:1oE6b8:3caV9rQf0v24gXfvozY2K6zz4ITjty52oqgRHZLhpyw', '2022-08-03 10:06:30.268797'),
('1ejvki rpm7393inxp6uf1a508oikhj57', 'eyJ1c2VyaWQiOjV9:1oE9H0:QVd_yVInOIdaeHkWo0CMd53O_s5B5euyq1e3LiWaVH8', '2022-08-03 12:57:54.686733'),
('1xjz27rwws42tk5n2orhya2ldkf1g6t', 'eyJ1c2VyaWQiOjV9:1mxOMK:l85z54bTor61HOnj7pdZjPhbnbt7ikf5Nm258dN2DTc', '2021-12-29 07:05:52.784561'),
('49qo7iki5uxczhyymi8ka7dnh6a2wva5',
'MmE4N2EzZmM3NTI1ODc3MjUxYjUxNW3O3WM4ZGExNWViMzRkN2MzYTp7Im5hbWUiOjF9', '2019-05-08 09:19:45.486328'),
('4df7s82pddaszour6twx23d86058ppjq',
'ZmNkODA5MmI1ZGQ0Yjk5MmZlNzEyNTcwNTcxNjk2ZWYxZTE3NTThkMj7InVzZXJpZCI6NX0=', '2020-11-23 11:49:21.396484'),
('4io28d085qjfib7a5s2qbhc8qp4wfiva', 'eyJ1c2VyaWQiOjE2fQ:1mAtmi:oiUbcN3WzJiaWnxMBZ6eIGMT08NS2y701JlpwqzBUK', '2021-08-17 12:44:40.453750'),
('4x6b78w9rfcn34v650kd2j7oij6atr8p',
'Zjk0Y2RIYjc4OTJhNWMyZjQyNmM4ZGRhYTVjNmVlNDFhZGE4ZmU3NTp7InVzZXJpZCI6Nn0=', '2019-12-27 12:07:42.082031'),
('6235pjzaab4rkdpl7z473pl7jcnaglfk', 'eyJ1c2VyaWQiOjF9:1oDk63:-6bic4A3ThrsjwGZVXTnXx2dpiFpK_FtFDDtpAsCEw', '2022-08-02 10:04:55.563356'),
('6mizyqlykom1hx0e8a29bxksdry4vjmy', 'eyJ1c2VyaWQiOjR9:1mxNx3:w_8CPNB2edZIGdqblqOMty5QV64ojOuzomD7t4d5bBY', '2021-12-29 06:39:45.556870'),
('7ixdamflp4fyjecn17bd7xfbsi7eowq', 'eyJ1c2VyaWQiOjEwfQ:1mBzQr:5DfHs08xygiklJxfW3kZF CrxrA_igxR5gbDcKt2e8', '2021-08-20 12:58:37.947486'),
('9eqxsh2vnry12u2z9t4sl6amij2te9jt', 'eyJ1c2VyaWQiOjJ9:1oE8nk:cDDqaEZRW7Nf6SKwUt6tIvJEdEy2qvTQzIrG8zvVQgQ', '2022-08-03 12:27:40.202847'),
('9vom7mmn5muyoiy8nytc9mxown1q1g2b', 'eyJ1c2VyaWQiOjE5fQ:1mDRHr:QCoJ_gmMMx_cxknA5j_5NlcTLnENHFouosRuxYZIYbI', '2021-08-24 12:55:19.038051'),
('b9cu6cjsqfm5mame5dylikpiiy7yn3w',
'OTk3NTk2YTE0NjM5MWQ0OGQ0MjY3NzBjNzdhOTc0ZWJhM2ZkMzdkMj7InVzZXJpZCI6MX0=', '2019-05-09 11:00:08.480453'),
('bhfid9lacfwlfi5yu3rgdg1uo5fp2bq8', 'eyJ1c2VyaWQiOjE4fQ:1mBH4F:2wUorkPET_MGY07bWd-Zp-9HZUjs3bGCHCu1j6BN-s', '2021-08-18 13:36:19.192796'),
('ct13q5fnp94zvnij8ekixwzcky2imc5e',
'YWUzM2IzMWJiYmQ3YmY2YzlkMGFlNTM1YmU5ZGM4YjQ0MmY1YTc0NTp7InVzZXJpZCI6NH0=', '2019-05-14 11:44:10.978515'),
('e07j4duysh402dedtomm8icctvs9ljgy',
'MmE4N2EzZmM3NTI1ODc3MjUxYjUxNW3O3WM4ZGExNWViMzRkN2MzYTp7Im5hbWUiOjF9', '2019-05-09 06:08:12.306625'),
('fuirwtsxfxeojownr7tm1lymoapsath', 'eyJ1c2VyaWQiOjR9:1mb0uA:DWInrgNFE2I8DeVkrQmZU1y_F_U4e0WgMqypgwqdUQ0', '2021-10-28 13:36:18.858332'),
('hbw74sg6w6e4wp89vq807vw0xhkh5s1h',
'MzU0ZWYzNTQ3MjM4MzZlOTVjM2M1MzQ4MmE5ODE0OTlkNDRkNDkwMDp7InVzZXJpZCI6MX0=', '2020-01-1007:40:38.067382'),

('hhng09zqax1cp3cmlx5np2pbc4fcbtw1', 'eyJ1c2VyaWQiOjExfQ:1mauzr:WoxSa_ktUEv37bMIXB5udKc6qLwi2Xgdg61oSSMEPgo', '2021-10-28 07:17:47.091519'),

('hhtt48je7019nzw6dee4ocuxxm9blqe',
'NGRhY2JkNmQ4ZTM4OTU0Y2UzMzFmZmZmOTgzYmE0MwVkoThiNjc2NTp7Im5hbWUiOjEsInVzZXJpZCI6MX0=', '2019-05-09 10:12:38.380843'),

('hj1muto4ffqaex29c3dz409vvpv04say1', 'eyJ1c2VyaWQiOjExfQ:1mavzk:CaUXoPZsk_YT0c367vmF36p-YAOYucPwJBis1ZGbtw', '2021-10-28 08:21:44.154458'),

('hsb5814on7cph0wvy0yls67ca94ngcq3', 'eyJ1c2VyaWQiOjExfQ:1mBzgz:cug3sAkQKH-bQBk9O510UsDjL-37eDV8mR9Qau3eIA', '2021-08-20 13:15:17.195464'),

('i77fui9jg9yk7nxc7u4ph5d6kg0nl6c', 'eyJ1c2VyaWQiOjExfQ:1mDPJC:kqt800XGsVGRjHS3TmeLFrJbrpIK4-GbH4ZirwIc7S4', '2021-08-24 10:48:34.860638'),

('ic3hqykgws5iy6fz5ns6h6f921jbjzmt', 'eyJ1c2VyaWQiOjExfQ:1kywHL:L_tahJ0VJb7myAbMbXpWZu9XrSaAMmduNxGd2x5gtmY', '2021-01-25 12:26:35.043761'),

('iz6wcyx97x1w6mpfc51g1tj72z2xghfn', 'eyJ1c2VyaWQiOjExfQ:1kwlIp:YKOKMwJARe6w057AKTGY1-GCuRcZaEAbJ0bdQao23wY', '2021-01-19 12:19:07.663490'),

('jjsqf7wcjkeflnrveo04dcvo9uzu7cj5', 'eyJ1c2VyaWQiOjExfQ:1maymY:2zgrkbwuf5-70r47-IcbfFKsYD5fnN-ja0O19zN-93Y', '2021-10-28 11:20:18.484981'),

('jpkxxiej4bdjin5tpdjm0xqhdooexz9o', 'eyJ1c2VyaWQiOjExfQ:1mBEdk:YOk6fHHfBMmtt5ZvSyzgy13Az8JS59iXbU4LO1Ps1RI', '2021-08-18 11:00:48.423036'),

('k7dyn4irgrj5wb4jucb4po527iw724dp', 'eyJ1c2VyaWQiOjExfQ:1l0JrY:2_TJ4L_XoHdOW51Zdp0MOdyBEZEzntk5pdXZFDmX9x4', '2021-01-29 07:49:40.202848'),

('krj5skq4szqbrcoq74ajzd7ff75g0jei', 'eyJ1c2VyaWQiOjExfQ:1oVBhF:Nsms03xuSjLhTC04j1jzWA6-BpEoyY9Dhm5vTA7Wlok', '2022-09-19 12:59:25.603816'),

('mwdomj2x38m4ckvzx39qw2vn56gktype', 'eyJ1c2VyaWQiOjExfQ:1oVANu:EWgOVwC7zy6h-q1h3MmcRSwPfkEYYiFDzUI9x26E8qk', '2022-09-19 11:35:22.223862'),

('o7x1vhluyypdfmgv7fmv6nohgn5ub55',
'NzMyZjlhNzFhZjk2ZGUzZmFiMmIzYjMwNTJkYTg5MDUzNmNlMdk4Mjp7InVzZXJpZCI6MTZ9', '2020-01-02 12:51:55.659179'),

('pc7qxugt25ep1yupy7kywndqxw44w6', 'eyJ1c2VyaWQiOjExfQ:1oXhoz:UrHqMrI8qnsGWkOPtZCYXYyN1S_uldQagLOM3dewjY', '2022-09-26 11:41:49.006822'),

('psdjoq42u7lqwfodftic5x6z9ij34nk', 'eyJ1c2VyaWQiOjExfQ:1mAXDq:a8YYY1YJU3jPv03qo9-VcrjRHnDWRsqGseiR93nOGVM', '2021-08-16 12:39:10.518259'),

('qnaolidvfx6bu9ra3uyqvkga7bv92f1',
'OTk3NTk2YTE0NjM5MwQ0OGQ0MjY3NzBjNzdhOTc0ZWJhM2ZkMzdkMjp7InVzZXJpZCI6MX0=', '2019-05-14 05:34:50.069335'),

('qorsfj8ub7601ehr291ro3n4zzw5v3e', 'eyJ1c2VyaWQiOjExfQ:1mFxUi:mMQom1btf6GfJPfFt2Wu_hLflJbWwVRomb-AlhxjHw', '2021-08-31 11:43:00.556244'),

('r9qk0kd407g591hugz99fhps8zofh69s', 'eyJ1c2VyaWQiOjExfQ:1mBxnG:qkd9MTM_FhhghUpV90qngEkwkoSKYdLbfwRKBLhK7Qg', '2021-08-20 11:13:38.356475'),

('sdcvtp7s5yj8q1lb0mdvlg8nj5wujqo', 'eyJ1c2VyaWQiOjExfQ:1kzJ3p:0g6nRuJv3TXWVpANqNgbJcrUv96ZU5UQwv3bgqBbLI', '2021-01-26 12:46:09.538596'),

('tejl09oetnyva23kqdbns5nfz5g8ug',
'OTk3NTk2YTE0NjM5MwQ0OGQ0MjY3NzBjNzdhOTc0ZWJhM2ZkMzdkMjp7InVzZXJpZCI6MX0=', '2019-05-09 11:19:24.387679'),

('u5icgvq3qt5nthdlv99go3r804ccghbo',
'MmE4N2EzZmM3NTI0Dc3MjUxYjUxNwM3OWM4ZGEzNWViMzRkN2MzYTp7Im5hbWUiOjF9', '2019-05-09 06:00:13.573226'),

('vfofeqf70uwf4jrh6b6xsetde58lny3f', 'eyJ1c2VyaWQiOjExfQ:1mFyou:QX_iGY3-VB7aToxeER8IL5h0PrRrYCaY5Hf2pQrqp', '2021-08-31 13:07:56.275870'),

('ws2o4cq1jbqep0e9s9v7n4erxatq9ic', 'eyJ1c2VyaWQiOjExfQ:1l2CgI:SmlpAnZzplZhPTFJ_rkEJstnZRI2CYWYtcah7PHPv-M', '2021-02-03 12:33:50.352453'),

```
('zak6z5x81xrpe7i51cmt7915z9k4u9dr', 'eyJ1c2VyaWQiOjJ9:1oE8wD:IeKP_1qUF_y8Q45zkh2iCL19BYap1vlukPPO2L08s3Q', '2022-08-03 12:36:25.292286'),
```

```
('zega5sz46ivu1tb1o1mtmg3v2ysxog1w', 'eyJ1c2VyaWQiOjJ9:1kuVm4:L7RizVvw4EC0IyYCYAIhGjC8lvZol_Z1abqVwdkdKkY', '2021-01-13 07:20:00.767751');
```

```
-----
```

```
--
```

```
-- Table structure for table remote_user_clientregister_model
```

```
--
```

```
CREATE TABLE IF NOT EXISTS
```

```
remote_user_clientregister_model (
```

```
id int(11) NOT NULL AUTO_INCREMENT,
```

```
username varchar(30) NOT NULL,
```

```
email varchar(30) NOT NULL,
```

```
password varchar(50) NOT NULL,
```

```
phoneno varchar(50) NOT NULL,
```

```
country varchar(30) NOT NULL,
```

```
state varchar(30) NOT NULL,
```

```
city varchar(30) NOT NULL,
```

```
address varchar(30) NOT NULL,
```

```
gender varchar(30) NOT NULL,
```

```
PRIMARY KEY (id)
```

```
) ENGINE=InnoDB DEFAULT CHARSET=latin1
```

```
AUTO_INCREMENT=3 ;
```

```
--
```

```
-- Dumping data for table remote_user_clientregister_model
```

```
--
```

```
INSERT INTO
```

```
remote_user_clientregister_model (id, username, email, password, phoneno, country, state, city, address, gender) VALUES
```

```
(1, 'Harish', 'Harish123@gmail.com', 'Harish', '9535866270', 'India', 'Karnataka', 'Bangalore', '#8928,15th Cross,Rajajinagar', 'Male'),
```

```
(2, 'Manjunath', 'tmksmanju13@gmail.com', 'Manjunath', '9535866270', 'India', 'Karnataka', 'Bangalore', '#8928,4th Cross,malleshwaram', 'Male');
```

```
-----
```

```
--
```

```
-- Table structure for table remote_user_depression_detection
```

```
--
```

```
CREATE TABLE IF NOT EXISTS
```

```
remote_user_depression_detection (
```

```
id int(11) NOT NULL AUTO_INCREMENT,
```

```
ridno varchar(3000) NOT NULL,
```

```
post_id varchar(3000) NOT NULL,
```

```

text varchar(30000) NOT NULL,
Prediction varchar(3000) NOT NULL,
PRIMARY KEY (id)
) ENGINE=InnoDB DEFAULT CHARSET=latin1
AUTO_INCREMENT=14 ;
--
-- Dumping data for table remote_user_depression_detection
--
INSERT INTO
remote_user_depression_detection (id, ridno, post_id, text, Prediction) VALUES
(1, '19468', '6d5p34', 'Long story short my family in NE Ohio is abusive as hell so I had to leave the state and stay with family down south. It isn''t working out and they''re sending me packing to Ohio because I guess I''m a financial problem even though I got a job here. I have nowhere I can stay. I''m even getting rid of my beloved cat so I can have options. I can''t go back to my family in Ohio.\r\n', 'Depression Found'),
(4, '1466', '9ltr4j', 'I could be homeless soon, and that''s not like "anything possible" but like it''s gonna be possible soon. I was looking in my area and there are some nice areas where water meets land that are away from homes but still in the town. It seems exciting to live near the water, but I have no idea what I could face. I should say, I''m not afraid to be homeless, this isn''t a bummer for me. I''m pretty stoic as well, but it''s still nice to be prepared.', 'No Depression Found'),
(6, '61', '7p30ks', 'I''ve been texting Rebecca on and off for the last week, always about my breakup. Bill went through Rebecca''s phone last night and saw she was texting me. He lost his mind. He won''t speak to her, and said I betrayed him. I tried to explain that he is my best friend and even if I liked Rebecca I would never try anything, ever.\r\n', 'No Depression Found'),
(7, '1661', '7w62yh', 'My wrists start to itch. My bruises from rock climbing and martial arts remind me of other, past bruises. Nightmares. I had such a fucking nightmare last night. Nightmare on top of nightmare.', 'Depression Found'),
(8, '45743', '9m7nz1', 'The server encourages happiness and improving yourself. Glamorizing mental illnesses and encouraging people to harm themselves is prohibited. If you are studying something related to mental illnesses or well-being, or if you have a job related to one of those things, you can have a role that shows you are a professional and willing to talk to people in case they have questions or need advice. &#x200B; Invite link: <url>\r\n', 'No Depression Found'),
(9, '29555', '7a6o31', 'They weep after every session with me and all I can do is give them the thousand yard stare. I don''t even know how to feel yet my girlfriend says I''m selfless to a fault how I can be I don''t know she always says she wishes she could have rescued kid me from my mother and has been the saint of a women that is still by my side and still wants to marry me. How and why I don''t know I feel worthless ans like I have nothing to offer up other than my love and the constant promise I''ll never leave her. I have lashed out so many times at her for things not even done by her and I die inside a little more everytime I do. I know she knows why it happens and understands the brain chimstry behind my psych issues as she is a sociology and psychology major/minor.', 'Depression Found'),
(10, '1667', '89slho', 'Like, I don''t think they happen if I distract myself with the Internet or doing some hobby that I like. I remember feeling like this at least once a week ever since I was around 15 or so. I used to have nightmares about either fighting for life with my brother or my dad or someone else, or about seizures happening to me or people around me every day. Now I have them maybe once a week or two. I get something that feels like an adrenaline rush when I''m bringing this up, for instance as I''m writing this, or when my brother decides to visit my mom, and sometimes it just happens randomly.\r\n', 'No Depression Found'),
(11, '1771', '9omoqn', '&#x200B; I''m sorry if this isn''t appropriate for the thread. I don''t really know if it''s appropriate anywhere. I guess that''s the point? "Am I normal or am I fucked up?"', 'Depression Found'),
(12, '471', '91pdnu', 'I feel like a completely different person. My best friend suddenly died in September and I thought I was finally healing from her sudden death, and now this horrible tragedy. I feel like I canâ€™t relate to humanity anymore except for people who have also unfortunately experienced this. Everything seems so trivial and empty. I already had anger issues before this, due to traumatic brain injuries, and now I feel a paradoxical combination of extreme rage/complete emptiness, etc.\r\n', 'Depression Found'),
(13, '24225', '8ygp52', 'Should I stick around and save up my money? I mean college A and C are pretty good choices right? A is almost free and I could make the best of it, and C I could always figure things out my freshman year and then commute, and we could still see each other. Do you think we see each other too much? Should I limit my time with him?\r\n', 'No Depression Found');
-----

```

```
--  
-- Table structure for table  
remote_user_detection_accuracy  
--  
CREATE TABLE IF NOT EXISTS  
remote_user_detection_accuracy (  
  id int(11) NOT NULL AUTO_INCREMENT,  
  names varchar(300) NOT NULL,  
  ratio varchar(300) NOT NULL,  
  PRIMARY KEY (id)  
) ENGINE=InnoDB DEFAULT CHARSET=latin1  
AUTO_INCREMENT=15 ;  
--  
-- Dumping data for table  
remote_user_detection_accuracy  
--  
INSERT INTO  
remote_user_detection_accuracy (id, names, ratio) VALUES  
(10, 'Naive Bayes', '87.73259820813232'),  
(11, 'SVM', '88.97312198483804'),  
(12, 'Logistic Regression', '88.1461061337009'),  
(13, 'Decision Tree Classifier', '85.18263266712613'),  
(14, 'Gradient Boosting Classifier', '84.63128876636802');  
-----  
--  
-- Table structure for table  
remote_user_detection_ratio  
--  
CREATE TABLE IF NOT EXISTS  
remote_user_detection_ratio (  
  id int(11) NOT NULL AUTO_INCREMENT,  
  names varchar(300) NOT NULL,  
  ratio varchar(300) NOT NULL,  
  PRIMARY KEY (id)  
) ENGINE=InnoDB DEFAULT CHARSET=latin1  
AUTO_INCREMENT=16 ;  
--  
-- Dumping data for table  
remote_user_detection_ratio
```

--

```
INSERT INTO remote_user_detection_ratio (id, names, ratio) VALUES
```

```
(14, 'No Depression Found', '44.44444444444444'),
```

```
(15, 'Depression Found', '55.55555555555556')
```

```
/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;
```

```
/*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;
```

```
/*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */
```

References

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Sara Owsley Sood, Elizabeth F. Churchill, and Judd Antin. 2012b. Automatic identification of personal insults on social news sites. *J. Am. Soc. Inf. Sci. Technol.*, 63(2):270–285, February.

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