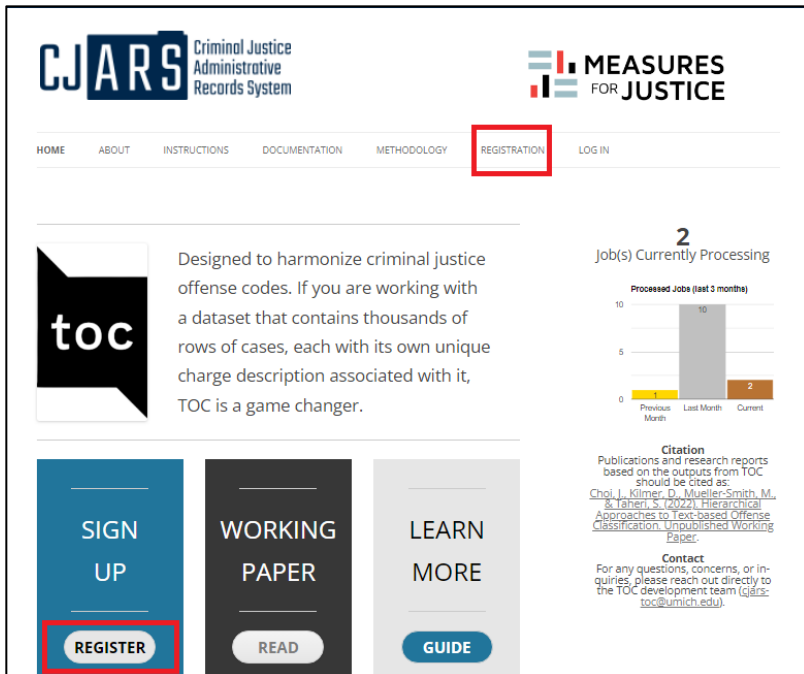


Contents

User Registration.....	2
Step 1. Navigate to the registration page	2
Step 2. Account Information	2
Step 3. Acknowledge Terms of Service	3
Step 4. Confirm Registration	3
Step 5. Set User Account Password	3
TOC Interface	4
Step 1. Navigate to the user login page	4
Step 2. Login to user account.....	4
Step 3. Account page overview.....	4
TOC Jobs	5
Step 1. Prepare CSV file.....	5
A. Single-Column	5
B. Multiple-Column	5
Step 2. Add TOC jobs.....	5
A. Upload CSV file	5
B. Validate submission	6
TOC Results	7
Step 1. TOC job notification	7
Step 2. Download TOC jobs.....	7
Step 3. Review results	8
A. TOC_Overview	8
B. TOC_Result.....	9
C. UCCS_Schema	9
D. MFJ_Schema, NCRP_Schema, NCIC_Schema, and NIBRS_Schema	10
Examples of Invalid CSV Data.....	10
Missing Variable Name(s)	10
Missing Text Description	10

User Registration

Step 1. Navigate to the registration page



Three different ways to access the user registration page:

- **Navigation menu:** click “REGISTRATION” tab from the menu bar at the top
- **Home page:** click the “REGISTER” button in the “SIGN UP” section
- **Browser URL:** go directly to <https://cjars-toc.isr.umich.edu/registration/>

Step 2. Account Information

Fill in the following information on the registration page:

- **Username:** Main username of the account. Username cannot be changed after registration.
- **First name:** First name of the person registering a TOC account
- **Last name:** Last name of the person registering a TOC account
- **Email:** Primary email address of the person registering a TOC account. If you forget your username, you can login using your email address. It is possible to update the primary email address but doing so will require email confirmation.
- **Affiliation:** Name of the affiliated organization (e.g. “University of XYZ”, “Institute for Social Research”)

Step 3. Acknowledge Terms of Service



Recaptcha

☐ I'm not a robot

You acknowledge that you are uploading data for classification by the University of Michigan's CJARS Text-based Offense Classification (TOC) tool. Submitted data will be retained in order to improve performance of the TOC tool.

☐ I acknowledge and agree to these Terms of Service. *

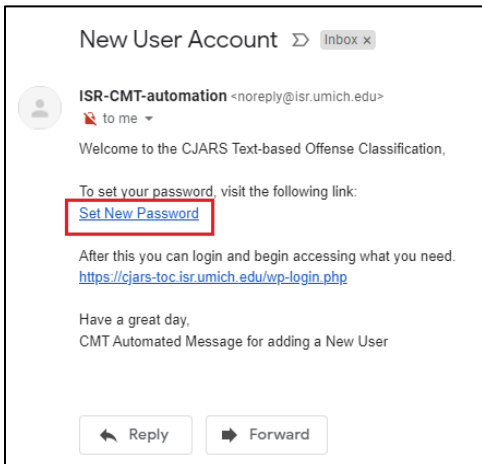
Classification occurs using a probabilistic model. As a result, some data may be incorrectly classified upon manual review of the output. If you identify any errors, please let us know at toc@umich.edu so that we can update our training data and improve future iterations of the algorithm.

Submit

To finish registration scroll down to the bottom of the registration form:

1. Check the box for “I’m not a robot” and complete the Captcha exercise if it appears
2. Check the box for acknowledging Terms of Service
3. Click “Submit” button to complete user registration

Step 4. Confirm Registration



New User Account Inbox x

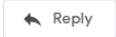
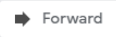
 **ISR-CMT-automation** <noreply@isr.umich.edu>
to me ▾

Welcome to the CJARS Text-based Offense Classification.

To set your password, visit the following link:
[Set New Password](#)

After this you can login and begin accessing what you need.
<https://cjars-toc.isr.umich.edu/wp-login.php>

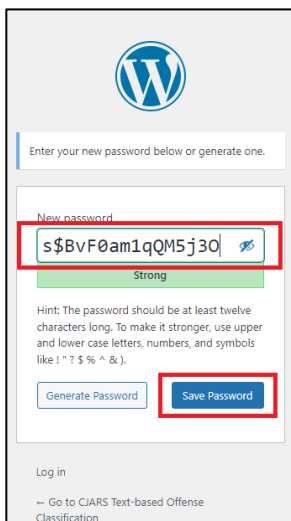
Have a great day,
CMT Automated Message for adding a New User

After submitting the user registration form, please wait a few minutes before checking your email for a message titled “New User Account” from “ISR-CMT-automation”.

To finish account creation, click “Set New Password” link in the automated email and continue to Step 5.

Step 5. Set User Account Password





Enter your new password below or generate one.

New password

Strong

Hint: The password should be at least twelve characters long. To make it stronger, use upper and lower case letters, numbers, and symbols like ! " ? \$ % ^ &).

Log in

← Go to CJARS Text-based Offense Classification

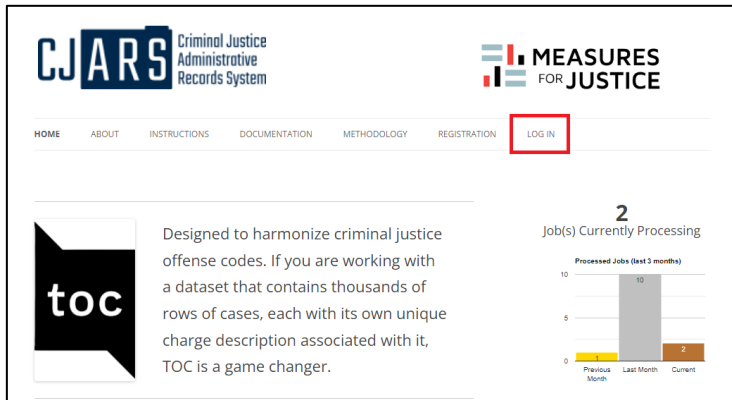
Clicking “Set New Password” will load a WordPress page with a randomly generated password populated in the “New password” field. To set your own password, clear out the randomly generated password and type in your preferred password.

To finalize the password change, click “Save Password” button.

Afterwards, you can login to the TOC site using the new password with either the username or the email address.

TOC Interface

Step 1. Navigate to the user login page



Navigate to the log in page using one of the following methods:

- **Navigation menu:** Click “LOG IN”
- **Browser URL:** <https://cjars-toc.isr.umich.edu/admin>

Step 2. Login to user account

Username or Email Address
cjars-toc@umich.edu

Password
[Masked]

☐ Remember Me

Lost your password?

[Go to CJARS Text-based Offense Classification](#)

Fill in login credentials:

- **Username or Email Address:** Users can log in to their accounts using either the registered username or email address. In either case, the login information is case-sensitive
- **Password:** Case-sensitive. To reset, click “Lost your password?” link to start password recovery process

Make sure the bottom of the login page says “Go to CJARS Text-based Offense Classification” to make sure you are logging into the correct WordPress site.

Step 3. Account page overview

Dashboard

Profile

TOC Jobs

TOC Jobs

Add New Job

Report Data Issue

Collapse menu

Howdy, [User Name]

[Add New Job](#)

Job Number	Job Identifier	Original Filename	Data Column	Status	Download Link	Uploaded/Available Until
15	6d2b51c85abb3f5d6c32d803c4921d82	Book1.csv		Not Completed		07/07/2022 / 08/06/2022

Thank you for creating with WordPress.

Version 6.0

- **Dashboard**

- WordPress dashboard screen that provides list of recent activities and changes on the website
- TOC users do not have to worry about this page

- **Profile**

- Modify website color theme, update user profile information, and change user password

- **TOC Jobs**

- Provides a list of the user-submitted TOC jobs and downloadable links for processed datasets.
- For first-time users, this page will show up as an empty table

- **TOC Jobs >> Add New Job**

- Main interface for uploading new data and adding new TOC jobs

- **TOC Jobs >> Report Data Issue**

- WordPress form for submitting any data issues. Any submitted reports will be forwarded to cjars-toc@umich.edu

TOC Jobs

Step 1. Prepare CSV file

A. Single-Column

	A	B
1	offense_description	
2	murder 1st degree	
3	possess controlled substance without prescription	
4	illegal possession of a legend drug	
5	simple possess sch iv cs xanax	
6	possess 2 bottles sleep med 2 owners	
7	possession of a prescription drug for any unlawful purpose	
8	flr keep narc in org container	
9	possession of alprazolam	
10	unlawful possession or use of a legend drug	

- First row of the file contains column name without spaces (e.g. “charge_desc”, “description”).
- Avoid naming the column as “desc” since this is the name of the temporary variable generated by preprocessing
- Subsequent rows contain unique offense descriptions

B. Multiple-Column

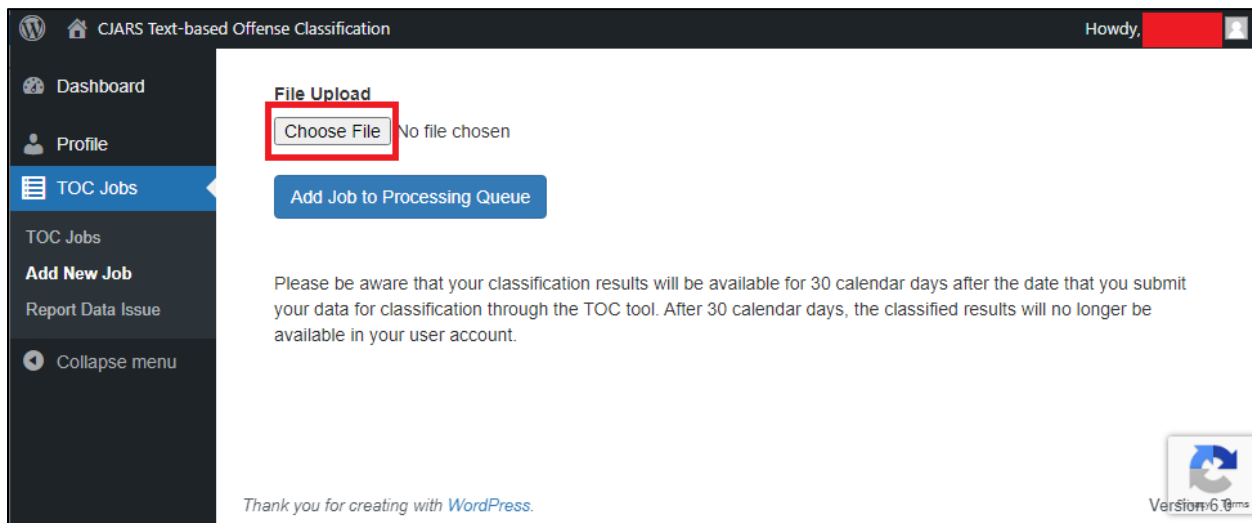
	A	B
1	state	charges
2	AL	murder 1st degree
3	AK	possess controlled substance without prescription
4	MI	illegal possession of a legend drug
5	TX	simple possess sch iv cs xanax
6	AZ	possess 2 bottles sleep med 2 owners
7	CT	possession of a prescription drug for any unlawful purpose
8	NY	flr keep narc in org container
9	NC	possession of alprazolam
10	ND	unlawful possession or use of a legend drug

- First row of the file contains column names for each columns in the CSV file
- Avoid naming the main input column as “desc” since this is the name of the temporary variable generated by preprocessing
- Subsequent rows contain unique observations

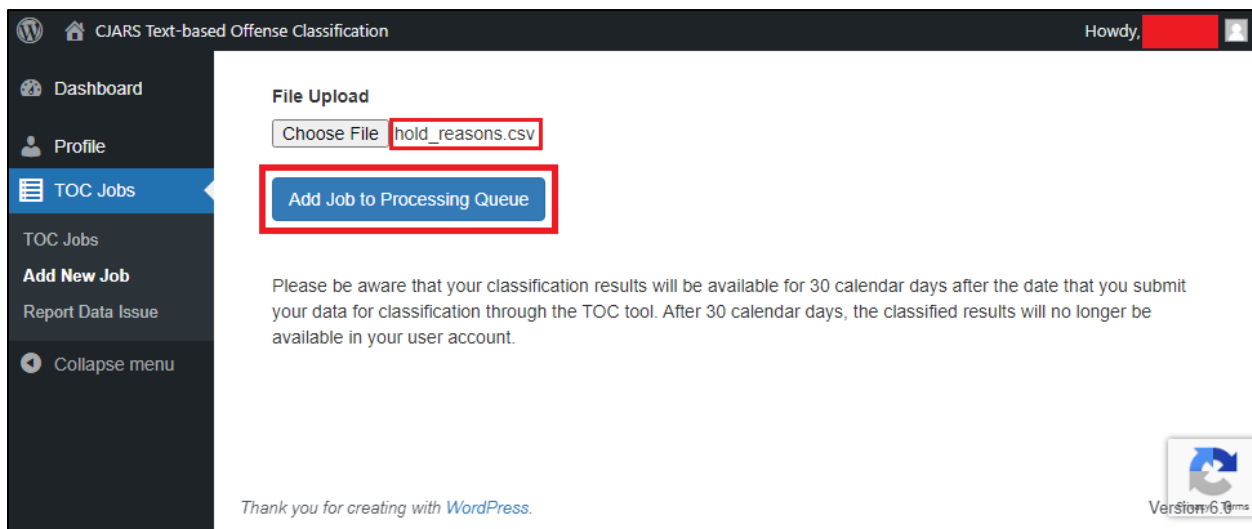
Step 2. Add TOC jobs

A. Upload CSV file

Log in to the TOC site and navigate to “Add New Job” page under “TOC Jobs” and click “Choose File” to upload the relevant CSV file.

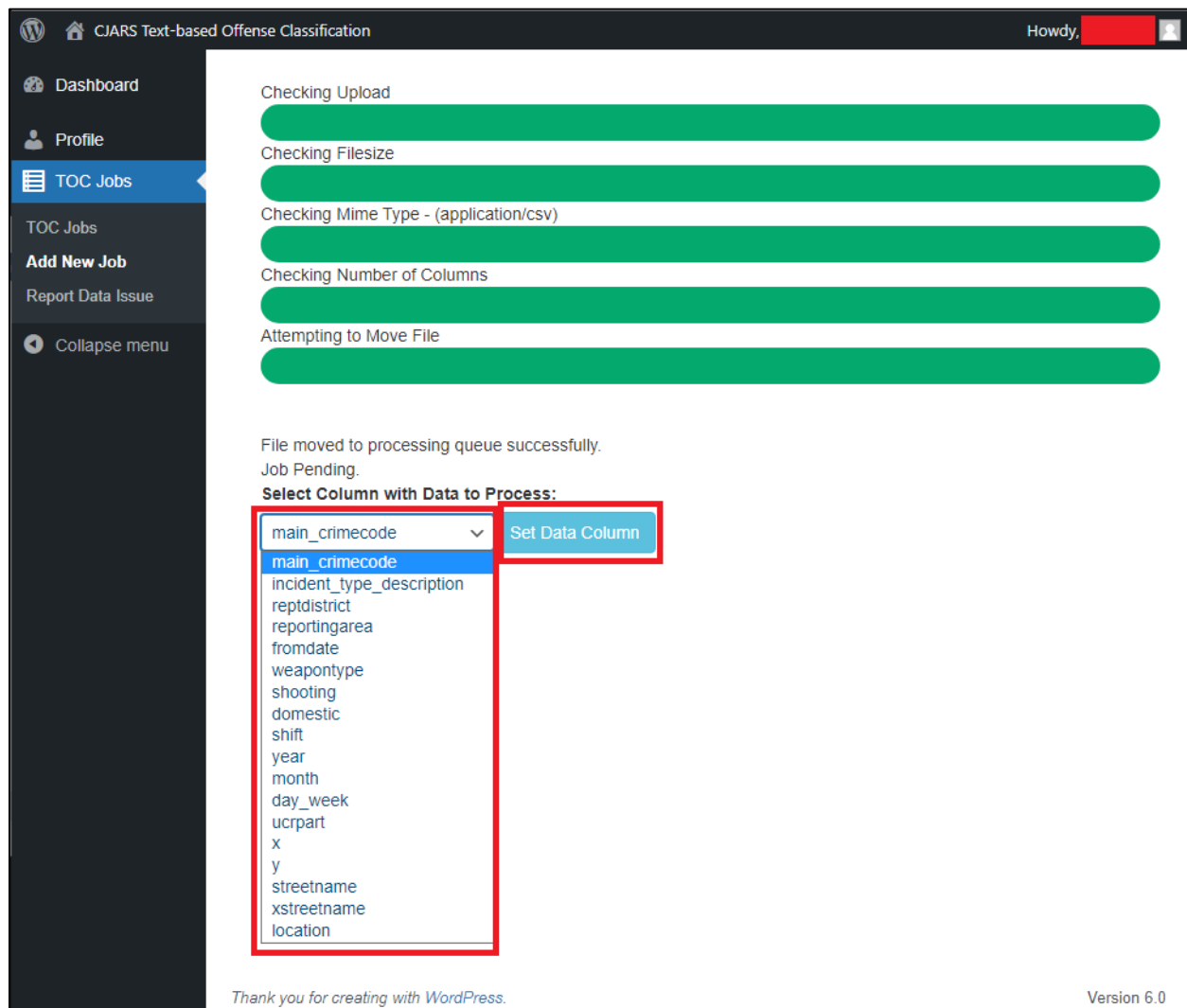


Once the file has been uploaded, click “Add Job to Processing Queue” button to initialize TOC job and complete the Captcha exercise if needed



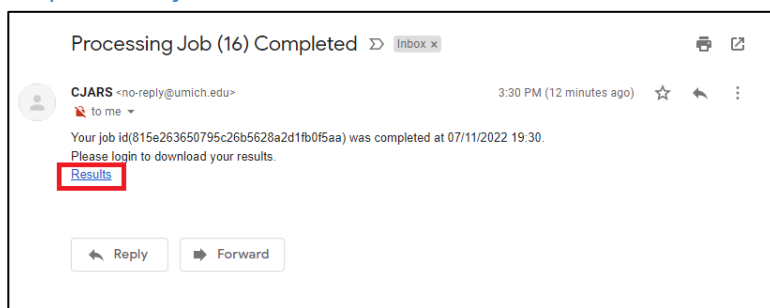
B. Validate submission

After a CSV file has been added to the processing queue, TOC runs a set of validation codes to verify the submitted file was appropriately formatted. If there are no errors, click the dropdown menu under “Select Column with Data to Process:” and select the variable that contains the offense descriptions. Once the variable is selected, click “Set Data Column” button to start the TOC job.



TOC Results

Step 1. TOC job notification



Once a TOC job is successfully completed, users will receive an automated notification in their registered email. Clicking the “Results” link in the email will forward the user to the “TOC Jobs” page.

Step 2. Download TOC jobs

In the “TOC Jobs” page, all of the jobs with “Completed” status will have a “Results” download button. If the status of a job remains as “Not Completed” after 30 minutes of submission, please avoid submitting the same file multiple times and instead, contact cjars-toc@umich.edu for support.

CJARS Text-based Offense Classification

Howdy, [User Profile]

[Add New Job](#)

Job Number	Job Identifier	Original Filename	Data Column	Status	Download Link	Uploaded/Available Until
17	0ef757cbd00ce2e4ae93da8768c7c2a2	multicolumn.csv		Not Completed		07/11/2022 / 08/10/2022
16	815e263650795c26b5628a2d1fb0f5aa	hold_reasons.csv		Completed	Results	07/11/2022 / 08/10/2022
15	6d2b51c85abb3f5d6c32d803c4921d82	Book1.csv		Not Completed		07/07/2022 / 08/06/2022

Thank you for creating with WordPress. Version 6.0

Clicking the “Results” button will start downloading “{job identifier}.xlsx” file. In the example above, Job Number 16 will export the data as “815e263650795c26b5628a2d1fb0f5aa.xlsx” file. The results are available for download for 30 days from the submission date. After the 30 days, the results will no longer be available for the user.

Step 3. Review results

The final XLSX file contains 7 separate spreadsheets:

A. TOC_Overview

Provides an overview of the TOC tool as well as table of contents of the output file

Text-based Offense Classification Tool (TOC)

Introduction

TOC is a result of a collaboration between Measures for Justice (MFJ) and the University of Michigan’s Criminal Justice Administrative Records System (CJARS) program, each using court records to assess the performance and impact of criminal case processes. We used hundreds of thousands of hand-coded records produced by MFJ and the machine learning expertise of the CJARS team, following an offense scheme adapted by the team from prior work of the NCRP and others. Together, we designed a uniform crime classification standard (UCCS) schema and an accompanying machine learning algorithm to predict the appropriate standard charge classification. TOC will make the painstaking task of hand-coding offense descriptions obsolete and usher in a new era of leveraging machine-learning assisted techniques.

Terms of Service

You acknowledge that you are uploading data for classification by the Text-based Offense Classification (TOC) tool. Submitted data will be retained in order to improve performance of the TOC tool. Classification occurs using a probabilistic model. As a result, some data may be incorrectly classified upon manual review of the output. If you identify any errors, please let us know at cjars-toc@umich.edu so that we can update our training data and improve future iterations of the algorithm.

TOC_Overview | TOC_Result | UCCS_Schema | MFJ_ ...

B. TOC_Result

Provides the user's submitted data with TOC predicted charge codes. The "probability" column represents the final probability of the predicted "uccs_code".

	A	B	C	D	E	F	G
1	hold_reasons	uccs_code	probability	mfj_code	ncrp_code	ncic_code	nibrs_code
2	Charge: 5-10-10	1010	0.9998906	10	010		09A
3	Charge: 5-10-10	1010	0.9413437	10	010		09A
4	Additional Hold	1010	0.4454749	10	010		09A
5	Charge: 5-10-10	1010	0.9996358	10	010		09A
6	Charge: 5-3-20	1011	0.9996044	11	011		
7	Charge: 5-3-20	1011	0.9683766	11	011		
8	Additional Hold	1010	0.4716544	10	010		09A
9	Additional Hold	1010	0.8311567	10	010		09A
10	Charge: 5-10-10	1010	0.9996358	10	010		09A
11	Warrant: BENC	1010	0.5872899	10	010		09A
12	Charge: 5-10-10	1010	0.9996358	10	010		09A

TOC_Overview **TOC_Result** UCCS_Schema MFJ_ ...

C. UCCS_Schema

Provides the full list of UCCS codes covered by the TOC tool

	A	B	C	D	E	F
1	uccs_code	charge_desc	offense_category_code	offense_category_desc	offense_type_code	offense_type_desc
2	1010	Murder	1	Murder	1	Violent
3	1011	Attempted Murder	1	Murder	1	Violent
4	1012	Conspiracy to Comm	1	Murder	1	Violent
5	1020	Unspecified Homicid	2	Unspecified homicide	1	Violent
6	1021	Unspecified Homicid	2	Unspecified homicide	1	Violent
7	1022	Unspecified Homicid	2	Unspecified homicide	1	Violent
8	1030	Voluntary Manslaugh	3	Voluntary/nonnegligent manslaughter	1	Violent
9	1031	Voluntary Manslaugh	3	Voluntary/nonnegligent manslaughter	1	Violent
10	1032	Voluntary Manslaugh	3	Voluntary/nonnegligent manslaughter	1	Violent
11	1040	Vehicular Manslaugh	3	Voluntary/nonnegligent manslaughter	1	Violent
12	1041	Vehicular Manslaugh	3	Voluntary/nonnegligent manslaughter	1	Violent
13	1042	Vehicular Manslaugh	3	Voluntary/nonnegligent manslaughter	1	Violent
14	1050	Involuntary Manslau	4	Manslaughter - non-vehicular	1	Violent
15	1051	Involuntary Manslau	4	Manslaughter - non-vehicular	1	Violent
16	1052	Involuntary Manslau	4	Manslaughter - non-vehicular	1	Violent

TOC_Overview TOC_Result **UCCS_Schema** MFJ_Schema N ...

D. MFJ_Schema, NCRP_Schema, NCIC_Schema, and NIBRS_Schema

The remaining sheets in the XLSX file serve as crosswalks for other offense classification schemas such as the ones used by the Measures for Justice (MFJ), National Corrections Reporting Program (NCRP), National Crime Information Center (NCIC), and National Incident-Based Reporting System (NIBRS).

	A	B	C	D
1	mfj_code	uccs_code	mfj_description	uccs_description
2	10	1010	Murder	Murder
3	11	1011	Attempted Murder	Attempted Murder
4	12	1012	Conspiracy to Commit Murder	Conspiracy to Commit Murder
5	15	1020	Unspecified Homicide	Unspecified Homicide
6	16	1021	Unspecified Homicide, Attempted	Unspecified Homicide, Attempted
7	17	1022	Unspecified Homicide, Conspiracy	Unspecified Homicide, Conspiracy
8	20	1030	Voluntary Manslaughter	Voluntary Manslaughter
9	21	1031	Voluntary Manslaughter, Attempted	Voluntary Manslaughter, Attempted
10	22	1032	Voluntary Manslaughter, Conspiracy	Voluntary Manslaughter, Conspiracy
11	25	1040	Vehicular Manslaughter	Vehicular Manslaughter
12	26	1041	Vehicular Manslaughter, Attempted	Vehicular Manslaughter, Attempted
13	27	1042	Vehicular Manslaughter, Conspiracy	Vehicular Manslaughter, Conspiracy
14	30	1050	Involuntary Manslaughter	Involuntary Manslaughter
15	31	1051	Involuntary Manslaughter, Attempt	Involuntary Manslaughter, Attempt
16	32	1052	Involuntary Manslaughter, Conspiracy	Involuntary Manslaughter, Conspiracy
17	35	1060	Kidnapping	Kidnapping
18	36	1061	Kidnapping, Attempted	Kidnapping, Attempted

Examples of Invalid CSV Data

Missing Variable Name(s)

First row of the CSV file starts with an offense description, not column labels

	A	B
1	AL	murder 1st degree
2	AK	possess controlled substance without prescription
3	MI	illegal possession of a legend drug
4	TX	simple possess sch iv cs xanax
5	AZ	possess 2 bottles sleep med 2 owners
6	CT	possession of a prescription drug for any unlawful purpose
7	NY	flr keep narc in org container
8	NC	possession of alprazolam
9	ND	unlawful possession or use of a legend drug
10	MD	prescription ill poss of

	A
1	murder 1st degree
2	possess controlled substance without prescription
3	illegal possession of a legend drug
4	simple possess sch iv cs xanax
5	possess 2 bottles sleep med 2 owners
6	possession of a prescription drug for any unlawful purpose
7	flr keep narc in org container
8	possession of alprazolam
9	unlawful possession or use of a legend drug
10	prescription ill poss of

Missing Text Description

As a text classification tool, the input variable requires English vocabulary to some extent. As a result, entries such as case number, citation number, or statute number should be omitted from the CSV file. Offense descriptions containing both the text description and additional offense identifiers such as statute numbers (e.g. "2C:35-10 CDS/Possession") can be included in the data, but the predicted results may not be as reliable.

	A	B	C	D
1	Statute	StatuteDescription	CaseNumber	MainCrimeCode
2	35 42 1 1 2		CF00001	05RB
3	2C:35-10		CF00002	04xx
4	35 43 10 3 3		CF00003	03xx
5	162205		CF00004	05CB

	A	B	C
1	Statute	CaseNum	MainCrimeCode
2	35 42 1 1 2	CF00001	05RB
3	2C:35-10	CF00002	04xx
4	35 43 10 3 3	CF00003	03xx
5	162205	CF00004	05CB