## CS 379: Final Project Final Project: World Covid Dataset

## **Project Guidelines:**

- You **Must** work in the groups of three to complete the project.
- Use **Python and ML Packages** to complete the project
- The first deadline for the project is on **December 16<sup>th</sup>**, **11:00 PM**. You must present your project on your final exam day along with your group. You are **not allowed to use your Free Pass** on the project.
- Submit the final report on December 16<sup>th</sup> in the AAAI format (the same format used in project #1). There are no feedback for the paper for final project. So, please make sure you follow the instructions in the AAAI format. The page limit is **four including the references.**

<u>Description of the Data Set:</u> The data set presents the covid data from around the world. It has information on total number of covid cases, number of deaths, total number of vaccinations, and many other columns. Please look through the CSV file attached in the folder to understand the dataset.

<u>Description of the tasks in the Project:</u> This is an open-ended project. So, please look through the dataset and pick any number of columns or all the columns and build any number of supervised (or) unsupervised algorithms we discussed in class. Please note that you can also learn and implement any algorithm that we did not discuss in class.

Make sure you perform the following tasks:

- Step 1: Please choose and apply data pre-processing techniques that you deem appropriate.
- Step 2: Pick one or more models to build on the dataset.
- Step 3: Evaluate your models with appropriate strategies.

Hint: Try and change your pre-processing steps (or) tweak the parameters to your model/models if you think the model performance is not good enough.

**<u>Description of the deliverables and grades:</u>** You should deliver each of the following items to receive an appropriate grade for your project.

- You must submit **only one ZIP folder** per group. The ZIP folder must be named after all the first names of your group members. For example, Sravya1\_Sravya2\_Sravya3. The folder must contain the following files:
  - a. Working code file/files: 50 points
  - b. Final AAAI report as PDF: 30 points
- Project demo with your group on the final exam day: 20 points