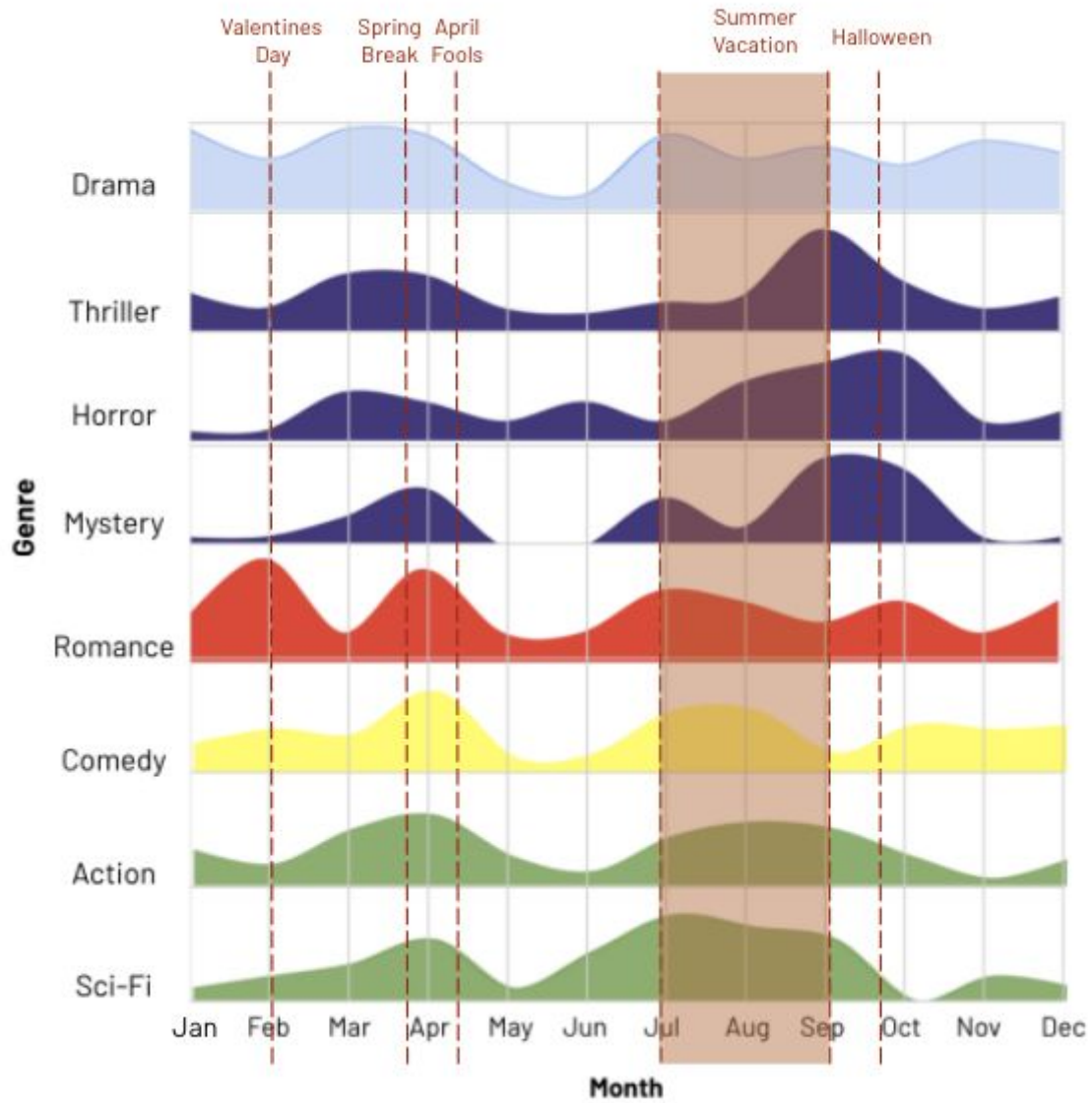


## Is the Release Date of Movies with Different Genre Dependent on the Schedule of Holidays?



This ridgeline plot is created to present and compare trends in the release date of movies with different genres. Month is on the x-axis, while genre is on the y-axis. Eight out of 21 genres are selected, which are drama, thriller, horror, mystery, romance, comedy, action, and sci-fi. A density plot is plotted for each genre, with the y-axis being the number of movies that are released. It can be observed that the release date of the movies is dependent on holidays and vacations. For thriller, horror, and mystery, the number of movies released plateaued between September and October. These genres are often related to Halloween, so are mostly released approximately before Halloween, which happens on October 31. Furthermore, since Valentines' Day happens on February 14, the release of the romance movie reached maximum in February. As for comedy, the release plateaued in April since April Fools Day happens on April 1. The release of action and sci-fi movies reached plateau in both April and from July to September. These genres' biggest target audience are generally teenagers and young adults, thus the release date corresponds to Spring break and Summer Vacation. Since drama is a common theme upon various holiday, drama is presented to show the overall trend in movie releasing dates.

The data is transformed to data that contains two attributes, which are month and genre. Month is an ordered ordinal data that is qualitative while genre is nominal data that is qualitative. Within each cell of the data is the count of released movies. For example, if two drama movies are released in January, then the count of the cell is 2. The data is presented by connecting points into lines. For each genre, first point out the number released in each month, then connect the points into density plots. In order to compare the trend of different genres, the density plots are positioned vertically on a common scale. Density plot instead of a bar chart is used in order to present the maximum clearer. For different genres that have similar trends, the same hue is used to fill the density plots; for genres having different trends, different hue is used. Using hues, readers can easily group genres with similar trends together while differentiating genres with different trends. Five colours were used in total. Drama is coloured with blue to represent neutral since it is not matched with a specific holiday. Thriller, mystery, and horror are coloured with dark purple to match the dark and creepy theme of Halloween. Romance is coloured with red to show the theme of passion and loving. Comedy is coloured with yellow to show joyfulness and playfulness. Lastly, action and sci-fi are coloured with green which is considered "cool" and "energetic". This colouring rule demonstrates the expressiveness principle and separability. It expresses the difference between the trends and enables readers to group similar trends, without being overcomplicated. Integral channels are also used by filling the same colour for similar trends. If each genre were coloured with different colours, it would be too complicated and the colouring has no meaning and is confusing the readers.

The design of the visualization does exist some limitations. By grouping genres with similar trends and filling them with different colour hues, it does make grouping easier. However, the trade-off is that it makes the graph too colourful. If we fill all genre with the same colour, it would be much simple and the timeline of different holidays are much easily observed. Another limitation is that the holidays and vacations are based on Western schedule. Since there do exist movies taken in Toronto that are made by directors in different countries, excluding local holidays from non-Western Countries disable us to observe possible trends. However, for the sake of simplicity, non-Western holidays are not listed. A possible topic to investigate in the future is the number of awards and nominations and IMDB ratings' impact on the plateau of the release. It might be that, for instance, since thriller movies released around October usually obtained more popularity, thus movie producer observed and follow past trends and also make the release date close to October.