Future Scope

To play the game Rock, Paper, and Scissors, all you need is a laptop or computer with a camera and the OS of your choice (MacOS, Windows, or Linux). Although our original aims were met, there are several ways in which this research might be improved. To begin with, the programme still needs the user to make the desired gestures in order to start a match. This gesture was done to improve the user's experience, due to which the complexities increased and computing resources got overworked.

Although we gathered and tagged quite a bit of data, it's a lot lower than we had anticipated. There are several advantages to having learning data from a larger number of users, such as enhancing the effectiveness of the database and improving the user's prediction and gaming experience. The player's gender, age, and many other characteristics may be used to properly categorise their actions. Even greater control over games would allow us to select the level of difficulty we desire and truly comprehend human strategies.

It's possible to look at other machine learning algorithms. There are still many people using convolution neural networks with Mediapipe and OpenCV, but newer object classification models might have been introduced since 2018. Despite the fact that Mediapipe is a computationally intensive paradigm, real-time processing is still challenging without a strong computing engine. The same dataset might be used to compare the performance of alternative, more efficient models. Making a Rock, Paper, Scissors application for mobile devices would be a lot simpler with this.

It is our belief that RNN's ability to accurately anticipate human behaviour while playing these games may be improved in the years ahead by using other algorithms to attain accuracy and improve the study outcomes. Finally, we intend to build a distribution-ready version of the programme too. There is a good chance that this will happen in the future.