

Online gaming is a word that is often used to describe a digital game that is booming in modern times. The types of players are also divided into two, namely players with high flying hours and amateur players. Each player has a different behavior when playing online gaming. In this final project, a chair will be built to detect the behavior or movement of players with high flying hours and amateur players while playing online gaming using the IMU sensor. The method used in this final project is Pearson Correlation, which is a statistical modeling of the system which is assumed to find the most decisive related variables between players with high flying hours and amateur players. Based on the test results, the smart chair can determine players with high flying hours and amateur players. Pearson Correlation has been implemented to find the feature that most determines the player's behavior, namely Gx and validated using the SVM model with 95% accuracy.

**Keywords:** *Online Gaming, IMU sensor, Pearson Correlation, SVM, Player Behavior*