FOOTBALL TOURNAMENT PREDICTION SYSTEM USING POISSON DISTRIBUTION METHOD

AHMAD MIZAN NUR HAQ
Informatics Study Program, Faculty of Science & Technology
University of Technology Yogyakarta
Jl. Ringroad Utara Jombor Sleman Yogyakarta
E-mail : ahmadmizannurhaq@gmail.com

ABSTRACT

Football is a very popular sport throughout the world, and football tournaments such as the AFC Asian Cup feature the best national football teams from the Asian continent with very tight competition in every round. The problem that occurs in tournament format soccer matches is that the results of soccer matches are very difficult to predict. Therefore, the author proposes a web-based application that uses the Poisson distribution method to help predict the results of football matches. In writing this final assignment report, the author used a dataset that includes the history of group stage football matches in the 2023 AFC Asian Cup tournament which was used to estimate the Poisson distribution parameters for predicting the results of football matches. By calculating the probability of winning and losing based on the mean goals scored and goals conceded. Comparison between predicted results and actual results in the knockout phase. Of the total of 15 matches tested, the Poisson distribution model was able to predict 10 out of 15 matches or 66.67%. The Poisson distribution model can be used as a prediction model as long as the lambda consists of appropriate and relevant data.

Keywords: Football, Python, Prediction, Poisson Distribution.