# Football Match Probability Prediction

Title of the session (you can be creative highlighting your findings)

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Abstract—Provide a summary of the session. What was done, what measurements were taken, brief methods, what calculations, brief conclusion. The Abstract should be approximately 250 words or fewer, italicized, in 10-point Times (or Times Roman.) Please leave two spaces between the Abstract and the heading of your first section. It should briefly summarize the essence of the paper and address the following areas without using specific subsection titles. Objective: Briefly state the problem or issue addressed, in language accessible to a general scientific audience. Technology or Method: Briefly summarize the technological innovation or method used to address the problem. Results: Provide a brief summary of the results and findings. Conclusions: Give brief concluding remarks on your outcomes. Detailed discussion of these aspects should be provided in the main body of the paper.

Index Terms-KNearest, XGB, Random, etc.

#### I. Introduction

POOTBALL one of the most popular and followed sports worldwide, not only captivates millions of fans but also moves enormous amounts of money through sports betting and related financial markets. In this context, the ability to accurately predict the outcome of football matches has become a primary goal for both fans and professionals in the betting industry. Predicting football match results is a complex task that involves a variety of factors, from the historical performance of teams (Goals, Rating), to match conditions (home, is cup, etc.), and the strategies employed by coaches.

This project focuses on exploring solutions to predict football match outcomes using the Football Match Probability Prediction dataset, which includes records of over 150,000 historical matches played between 2019 and 2021. The objective is to develop models capable of predicting whether a team will win, draw, or lose in their upcoming match.

In the context of the Dataset to be used, it is essential to understand the fundamentals of European football, especially its leagues and cups. European leagues are annual competitions where teams face each other twice over a full season, playing one match at home and one away against each rival. In addition to national leagues, European teams participate in various national and international cup competitions. National cups are direct elimination tournaments within each country, where teams compete in knockout matches until only one winner remains. At the European level, competitions begin with a qualifying phase based on performance in national leagues, followed by a group stage where teams play home and away matches.

#### II. MATERIALS AND METHODS

List of materials used and how these were used / connected (good opportunity to present block diagrams to show connections). Use good drafting practice when producing figures, graphs, drawings, or schematics and label them for easy reference. Include schematics for any circuits. If using latex use "cite" command to cite references [1].

What calculations were done. List and number your equations (Eq. 1) to be able to referred them in the text. Equations are centered and the equation numbers are right justified. The equation number is placed in ( ). Be sure that the symbols in your equation have been defined. See example Equation 1.

$$F = ma (1)$$

1

Where F equals to force, m to mass and a to acceleration.

#### III. RESULTS

Show plots of any data collected and describe with words what your plots are showing. Describe the relationship between variables and time. Remember to number all your figures. This is the most critical part affect the technical achievement.

No picture, table, schematic, or graph should appear without a name (generally of the form Fig.1 o Table 1). None should appear without a reference to them by name in the main body of the writing. All figures and tables must be discussed in the text, including what it is, significant observations, and analysis.

Capitalize "Table" and "Fig." any time they are accompanied by specific table or figure numbers. Examples: "The measured data are plotted in Fig. 2. The figure shows a linear relationship in....". "The table shows ..." vs. "The data of Table 3..."

Student	Max Temperature
aabbbccc	$35^{\circ}$
eeeddd	$54^{\circ}$
eeeddd	$54^{\circ}$
TABLE I	

Temperature measurements performed for session 1.

Use your word processor to make "real tables" (i.e., boxed in, etc.). Center all tables and include a heading and caption with the appropriate table number below each table. For example, "Table 1: Temperature measurements performed for session 1."

Figures must be centered, and the figure number and caption is centered beneath the figure. For example, "Figure 1".

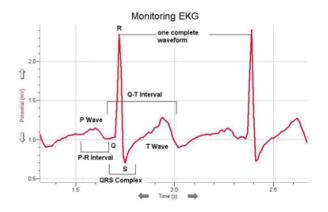


Fig. 1. Illustrations, graphs, and photographs may fit across both columns, if necessary. Your artwork must be in place in the article.

Always spell out table or Table. Give abbreviation of Figure, i.e., Fig., when used in the middle to end of sentence, but spell it out when used at the very start of the sentence.

All graphs must be done with a computer (i.e., spreadsheet software such as Microsoft Excel or even Matlab.). Do not include hand drawn graphs unless specifically instructed to do so.

Include a leading zero when a number's magnitude is less than 1 (use 0.83 instead of writing .83).

Use your word processor for Greek symbols for common engineering quantities as  $\beta, \pi, \gamma, \Omega$ .

#### IV. DISCUSSION AND SUMMARY

Discuss any interesting result related to the materials used or to any claim from the introduction. Discuss your measurements using engineering terms (accuracy, precision, resolution, etc). Give technical conclusions. Restate the main objectives and how or to what degree they were achieved. What principles, laws and/or theory were validated by the experiment? Describe some applications of your results and comment any possible recommended future work.

### APPENDIX A

## HAND CALCULATIONS (OR NAME YOUR TITLE FOR APPENDIX SUBTITLE)

List any extra evidence such as photos of the session, that may help you support your claims. You can include all hand calculations, extra graphs and plots, simulation results, etc.

#### ACKNOWLEDGMENT

The authors would like to thank...

#### REFERENCES

[1] R. S. Kulkarni, S. L. Chavan, and D. B. Talange, "A green house electricity and heat generation: Solar PV/thermal panel-review," in *Proc. Int. Conf. Industrial Instrumentation and Control (ICIC)*, May 2015, pp. 680–682. DOI: 10.1109/IIC.2015.7150828.

Examples of references:

Example of data book:

[2] National Operational Amplifiers Databook. Santa Clara: National Semiconductor Corporation, 1995 Edition, p. I-54.

Example of textbook:

[3]M. Young, The Technical Writer's Handbook. Mill Valley, CA: University Science, 1989.

Example of scientific journal paper:

[4] J.W. Smith, L.S. Alans and D.K. Jones, "An operational amplifier approach to active cable modeling", IEEE Transactions on Modeling, vol. 4, no. 2, 1996, pp. 128-132.

Example of conference paper proceedings:

[5] J.W. Smith, L.S. Alans and D.K. Jones, "Active cable models for lossy transmission line circuits", in Proc. 1995 IEEE Modeling Symposium, 1996, pp. 1086-89.

Example of Internet web page:

[6] Approximate material properties in isotropic materials. Milpitas, CA: Specialty Engineering Associates, Inc. web site: www.ultrasonic.com, downloaded Aug. 20, 2001.

List and number all bibliographical references at the end of your paper in **9 or 10 point** Times, with 10-point interline spacing. When referenced within the text, enclose the citation number in square brackets, for example [1].

Use IEEE format. Cite any external work that you used (data sheets, text books, Wikipedia articles, . . . ). If you get a formula from a Wikipedia article, you must cite the article, giving the title, the URL, and the data you accessed the article as a minimum. If you copy a figure, not only must you cite the article you copied from, but you must give explicit figure credit in the caption for the figure: This image copied from . . . . If you modify a figure or base your figure on one that has been published elsewhere, you still need to give credit in the caption: This image adapted from . . . .