Problem Set 2: Predicting Poverty

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***Resumen*—En este Problem Set 2, se realizará la predicción de pobreza para los hogares de la Gran Encuesta integrada de Hogares 2018, utilizando los métodos ROC, Falsos Positivos y Negativos, comparando dos modelos de categoría y de ingreso. El resultado, es que para el primer modelo, se utilizaron xx variables para la predicción, mientras que para el ingreso se utilizaron xx. El link al Github del presente taller, se encuentra en el siguiente enlace: https://github.com/mvgaona/Problem-Set-N-mero-2**

***Index Terms*—component, formatting, style, styling, insert**

I. Introducción

Escribir la introducción del trabajo

II. Datos

Escribir la defensa de los datos usados.

II-A. Por silas

Frase por silas

III. Modelo y Resultados

Para comentar cualquier cosa III-A–**??** below for more information on proofreading, spelling and grammar.

Keep your text and graphic files separate until after the text has been formatted and styled. Do not number text heads—LaTeX will do that for you.

III-A. Modelo de Clasificación

Escribir los puntos relacionados en el problem set como:

- A detailed explanation of the final chosen model. The explanation must include how the model was trained, hyperparameters selection, and other relevant information.
- Include comparisons to at least 5 other models. You can compare them in terms of ROC, AUC, False Positives, or False Negatives.
- Describe the variables that you used in the model and a measure of their relative importance in the prediction.
- Describe any sub-sampling approach used to address class imbalances.

III-B. Modelo del ingreso

- A detailed explanation of the final chosen model. The explanation must include how the model was trained, hyperparameters selection, and other relevant information.
- Include comparisons to at least 5 other models. Compare them in terms of MSE.
- Convert the predicted income to a binary indicator and show the performance in terms of the ROC, AUC, False Positives, or False Negatives.
- Describe the variables that you used in the model and a measure of their relative importance in the prediction.

IV. Conclusiones y recomendaciones

Se escriben las principales conclusiones y recomendaciones del ejercicio realizado anteriormente.

Lo que sigue es puro código que nos puede ayudar a ingresar fórmulas o datos chéveres en el paper.

The preferred spelling of the word “acknowledgment” in America is without an “e” after the “g”. Avoid the stilted expression “one of us (R. B. G.) thanks . . .”. Instead, try “R. B. G. thanks. . .”. Put sponsor acknowledgments in the unnumbered footnote on the first page.

IV-A. Equations

Number equations consecutively. To make your equations more compact, you may use the solidus (/), the exp function, or appropriate exponents. Italicize Roman symbols for quantities and variables, but not Greek symbols. Use a long dash rather than a hyphen for a minus sign. Punctuate equations with commas or periods when they are part of a sentence, as in:

$$a + b = \gamma \tag{1}$$

Be sure that the symbols in your equation have been defined before or immediately following the equation. Use “(1)”, not “Eq. (1)” or “equation (1)”, except at the beginning of a sentence: “Equation (1) is . . .”

IV-B. Figures and Tables

IV-B0a. Positioning Figures and Tables: Place figures and tables at the top and bottom of columns. Avoid placing them in the middle of columns. Large figures and tables may span across both columns. Figure captions should be below the figures; table heads should appear above the tables. Insert figures and tables after they are cited in the text. Use the abbreviation “Fig. 1”, even at the beginning of a sentence.

Figure Labels: Use 8 point Times New Roman for Figure labels. Use words rather than symbols or abbreviations when writing Figure axis labels to avoid confusing the reader. As an example, write the quantity “Magnetization”, or “Magnetization, M”, not just “M”. If including units in the label, present them within parentheses. Do not label axes only with units. In the example, write “Magnetization (A/m)” or “Magnetization

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TABLE TYPE STYLES

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[a]Sample of a Table footnote.

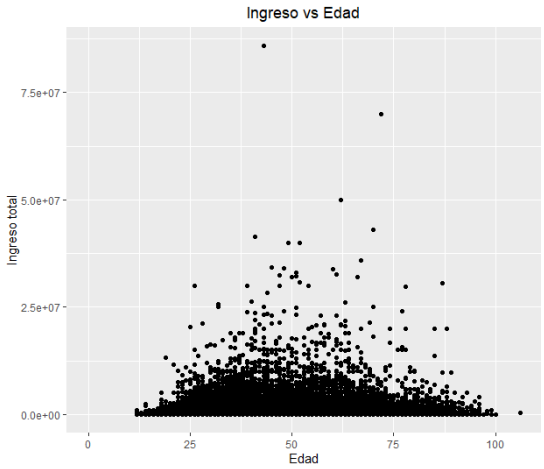

Figura 1. Example of a figure caption.

{A[m(1)]}", not just "A/m". Do not label axes with a ratio of quantities and units. For example, write "Temperature (K)", not "Temperature/K".

REFERENCES

Please number citations consecutively within brackets [1]. The sentence punctuation follows the bracket [2]. Refer simply to the reference number, as in [3]—do not use "Ref. [3]" or "reference [3]" except at the beginning of a sentence: "Reference [3] was the first ..."

Number footnotes separately in superscripts. Place the actual footnote at the bottom of the column in which it was cited. Do not put footnotes in the abstract or reference list. Use letters for table footnotes.

Unless there are six authors or more give all authorsñames; do not use "et al.". Papers that have not been published, even if they have been submitted for publication, should be cited as "unpublished" [4]. Papers that have been accepted for publication should be cited as "in press" [5]. Capitalize only the first word in a paper title, except for proper nouns and element symbols.

For papers published in translation journals, please give the English citation first, followed by the original foreign-language citation [6].

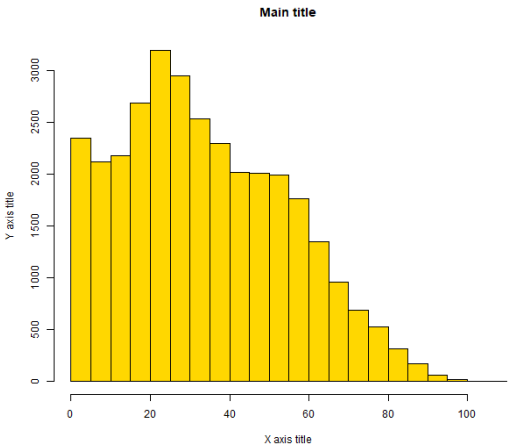

Figura 2. Example of a figure caption.

REFERENCIAS

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[3] I. S. Jacobs and C. P. Bean, "Fine particles, thin films and exchange anisotropy," in Magnetism, vol. III, G. T. Rado and H. Suhl, Eds. New York: Academic, 1963, pp. 271–350.

[4] K. Elissa, "Title of paper if known," unpublished.

[5] R. Nicole, "Title of paper with only first word capitalized," J. Name Stand. Abbrev., in press.

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