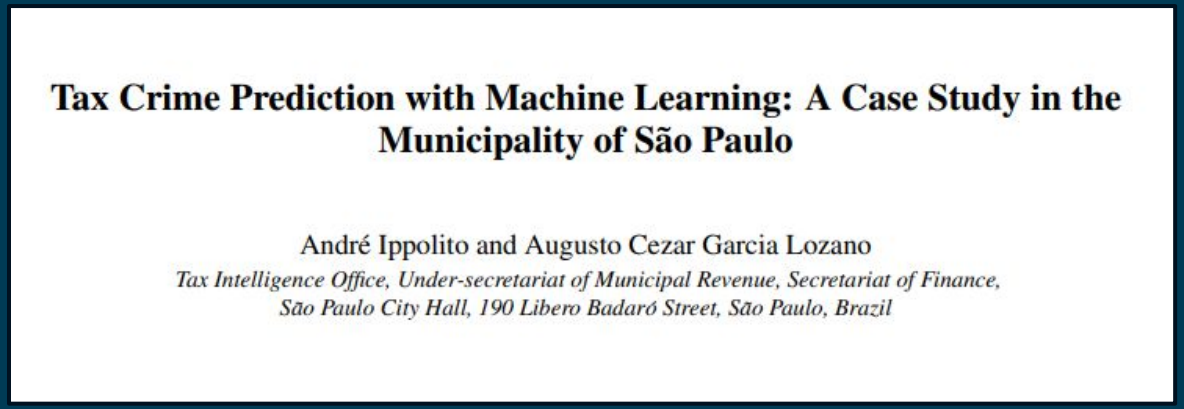
TAX CRIME PREDICTION USING ML



Tax Crime Prediction with Machine Learning: A Case Study in the Municipality of São Paulo

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Specific Objectives:

- Train a model according to the Indian Tax System(Combined)
- Predict Tax Fine Values(Combined)
- Applying Principal Component Analysis(Combined)
- Inclusion of Time Variable(Combined)

Data Sets:

- Direct Tax Data released by Central Board of Direct Taxes: https://incometaxindia.gov.in/Pages/Direct-Taxes-Data.aspx

Midway Work and Expected Results:

- Compare the algorithms like Random Forests, Naive Bayes, Decision Trees, Logistic Regression, Ensemble Learning and Neural Networks using their precision, recall, f-measure, specificity, and accuracy values
- Apply the best algorithm on our validation set

References:

- Lozano, Augusto & Ippolito, André. (2021). Tax Crime Prediction with Machine Learning: A Case Study in the Municipality of São Paulo.
- Johnson, Richard A. & Wichern, Dean W., Pearson, Prentice Hall. Applied Multivariate Statistical Analysis.