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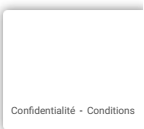
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Affiliation

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Authors

Ousseynou Mbaye [1], Mouhamadou Lamine Ba [1], Alassane Sy [1]

Affiliation

- [1] Université Alioune Diop de Bambey, Bambey, Senegal.

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Abstract

Malaria is still a real public health concern in Sub-Saharan African countries such as Senegal where it represents approximately 35% of the consultation activities in the hospitals. This is mainly due to the lack of appropriate medical care support and often late and error-prone diagnosis of the disease. For instance, largely used tools like Rapid Diagnosis Test are not fully reliable. This study proposes an extensive study of the efficiency of the most popular machine learning models for the task of Malaria occurrence prediction. We have considered patients from Senegal and have evaluated the overall accuracy of each considered algorithm based on sign and symptom information. Our main result is that machine learning algorithms are promising, in particular Naive Bayesian presents a recall very close to that of a rapid diagnostic test while improving highly its precision by 9%.

Keywords: ML; Malaria; Sign; Symptom; evaluation; performance; prediction.

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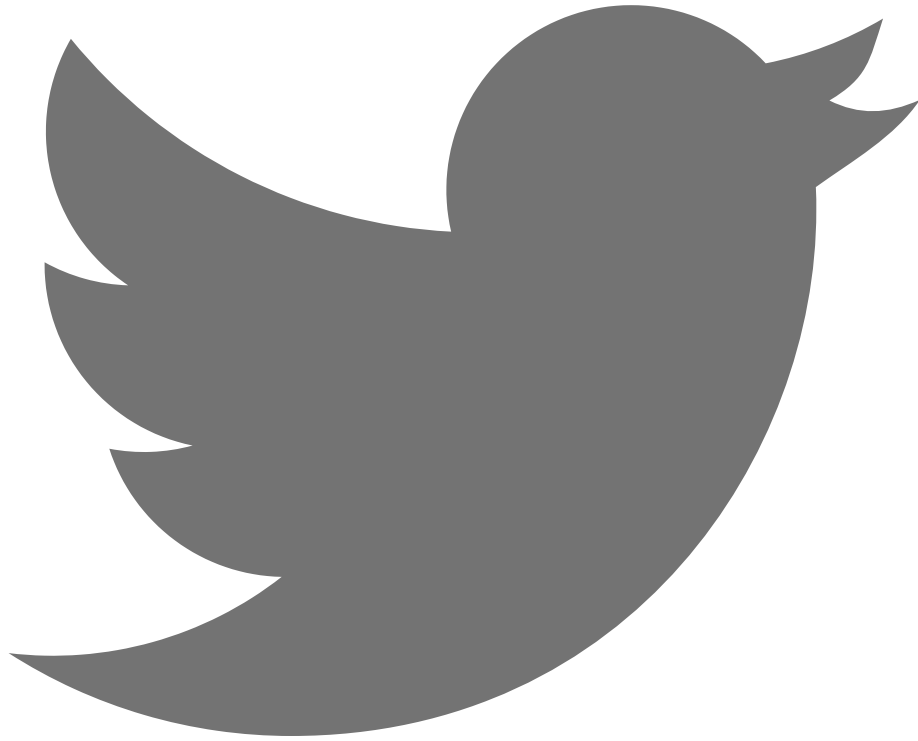**Full text links** [x]
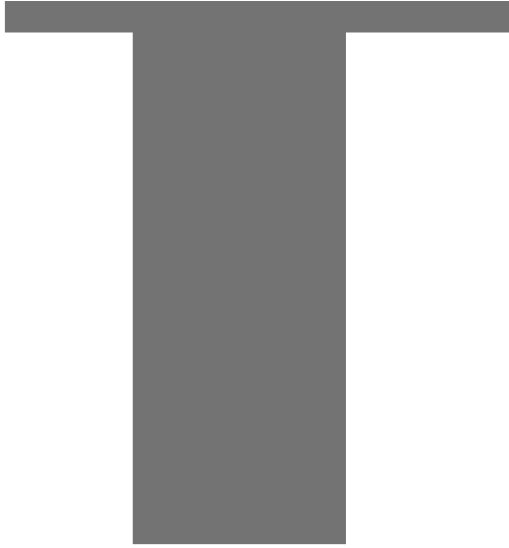full text provider logo IOS Press
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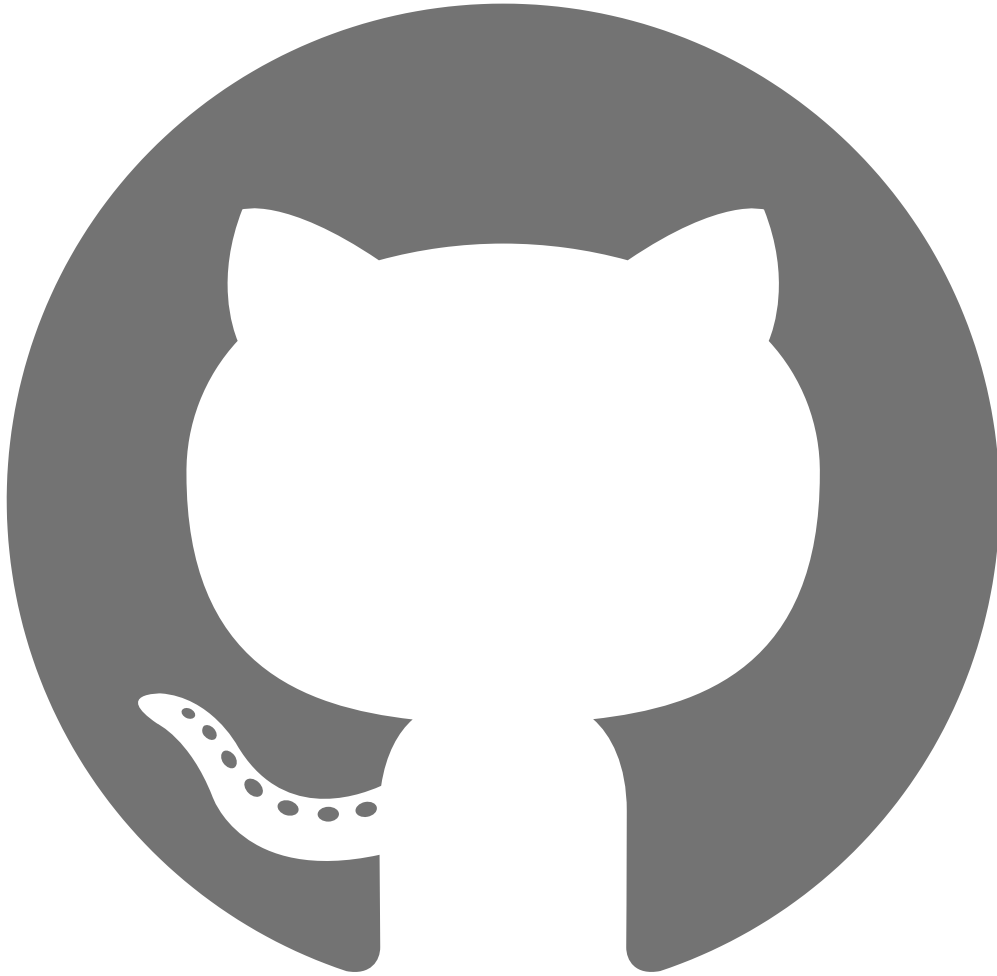
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