Analysis of Malaria Risk based on Housing Conditions in sub-Saharan Africa

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Malaria is still the **most deadly** and **endemic** parasitic disease in sub-Saharan Africa.

Scientific Reasons

- Anomalous climate patterns
- Emergence of parasite resistance to anti-malarial medicines
- Mosquito resistance to insecticides

Social Reasons

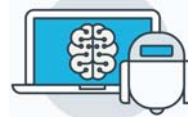- Most of the inhabitants are not aware of the risk factors and how to avoid them

Approach

Input Data
- Housing conditions
- Epidemiology

Machine Learning

- **Causal Inference:** housing conditions → risk of malaria infection
- **Patterns:** which housing features contribute the most to malaria vulnerability

Output: Recommendation on
- housing structure unfavorable for mosquitos
- rural housing planning to avoid spread of malaria

Image Credits
- SolarMal project
- https://hackernoon.com/coursera-vs-udacity-for-machine-learning-f9c0d464a0eb
- https://www.mosquitnoband.com/do-mosquitoes-have-teeth/