GeoVin

Public participation in the fight against Chagas disease

CEPAVE CONICET UNLP

UNIVERSIDAD NACIONAL DE LA PLATA

Through the mobile app, citizen scientists report the occurrences of 16 species of

Kissing bugs

Triatoma breyeri
T. delpontei
T. eratyrusiformis
T. garciabesi
T. guasayana
T. limai
T. patagonica
T. platensis
T. rubrovaria
T. sordida
Psammolestes coreodes
Panstrongylus geniculatus
P. guentheri
P. megistus
P. rufotuberculatus

and *Triatoma infestans*

main vector of Chagas disease

affecting 8 million people worldwide
(1.6 million in Argentina)

Multidimensional health issue

Biomedical & epidemiological

Sociocultural

Political & economical

android

Photo of the insect
Take two photos with the app

Geolocate & send
the report to the server

Data gets reviewed
by trained personnel remotely

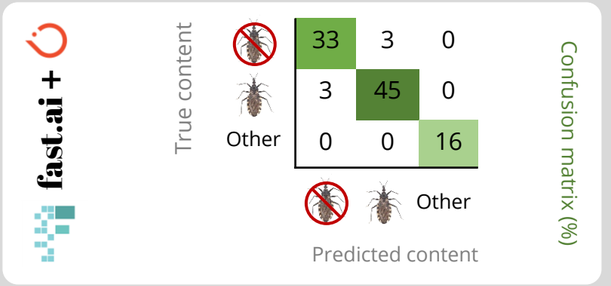
User is notified
and directed to the nearest health care center

Data is shared
openly and in real-time

Image recognition

Kissing bug photos collected with cellphones in the field by our citizen scientists were used to train a Convolutional Neural Network

Will be available in the app in 2021!



94% accuracy (so far)!

+ 800 citizen scientists

+ 9000 records
from bibliography and fieldwork

+ 950 reports
from citizen scientists

geovin.com.ar

@geovin

Cochero, J.; Pattori, L.; Balsalobre, A.; Ceccarelli, S.; Martí, G.