REPORT ON DATA MATRIX DETECTION.

Images containing data matrix are collected and are fed into the matrix detector program. For which the following data is observed.

Total number of JPEG files: 37

Number of files where area is detected: 25

Out of these 35, 22 instances had returned a code, while others returned an empty string.

Chart, bar chart

Description automatically generated

true positives = 19

false positives = 0

true negatives =

false negatives = 6 + 12

The model is able to detect the codes from the following group of images.

A picture containing text, indoor

Description automatically generated



A picture containing text, indoor, black

Description automatically generatedA picture containing text, indoor, black

Description automatically generatedThe model could not detect codes from the following images

A picture containing text, indoor, black

Description automatically generated

The undetected data matrices like the following

A close up of a cell phone

Description automatically generated with low confidence

A picture containing text

Description automatically generatedA picture containing shape

Description automatically generated

The problem with the decoding of the data matrix is that the code is distorted in the image or unclear matrix code. When tested using an online decoder, the data matrix could not be decoded.

Try threshold, next eroded/dilute, next try gray.