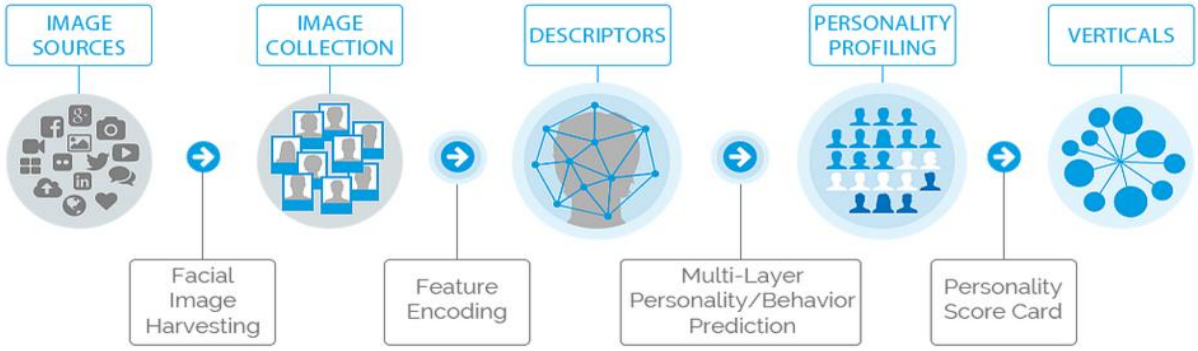
About AI in Swachh Bharat Mission - Urban

Usecase – Individual Household Latrine Constructed in Swachh Bharat Mission - Urban

Problem Statement - To identify Constructed Toilet Seat and Beneficiary Image in Toilet Photos uploaded by citizens through mobileapp to the portal and as reflected in dashboard of Swacchbharaturban.gov.in.

Computation of Image Recognition Process -



Machine Learning Algorithm Used

1. KNN & SIFT Algorithm for Toilet Detection.
2. HAAR Cascade Frontal Face Default for Human face Detection

Deep Learning Algorithm Used

3. Convolutional Neural Network

Results -

1. 88% Accuracy with Machine Learning Algoritms (65000 Photos Used)
2. 96% accuracy with Deep Learning (Training dataset - 5 lac ToiletPhotos)

APPLICATION_ID	Toilet Seat Found -Detection by Machine Learning	APPLICATION_ID	Toilet Seat Not Found - Detection by Machine Learning
AR18A0000920		OR1500028925	
AS17T0013676		SK18S0000008	

Toilet Seat Detection in Toilet Photos uploaded in Swachh Bharat Urban Mission Portal by Mobile App

APPLICATION_ID	Beneficiary Found -Detection by Machine Learning	APPLICATION_ID	Beneficiary Not Found - Detection by Machine Learning
AR18A0000920		HR16E0031714	
MH17U0268710		KA1500138169	

Beneficiary Detection in Toilet Photos uploaded in Swachh Bharat Urban Mission Portal by Mobile App