# Main Features

* Scene Descriptor: Describes the scene around you
* Person: Recognizes friends and describes people around you, including their emotions
* Documents: Provides audio guidance to capture a printed page and recognizes the text, along with its original formatting then speaks the document

## Scene Descriptor

Image

Voice/Vibration Feedback

Time-of-flight sensor

Obstacle Detection

(Google ARCore)

Object Detection

(TensorFlow Lite)

## People Recognition

Image

Facial region extraction

Facial component extraction

Feature extraction

Emotion detection using fuzzy classifier

Voice feedback

Face detection

Face recognition

## Documents

Preprocessing

Image of a document

Segmentation

Feature extraction

Classification

Preprocessing consists of

1. Noise removal
2. Binarization. i.e. converts image into binary image
3. Morphological operation. This will increase or decrease the size of the image to a constant image size.