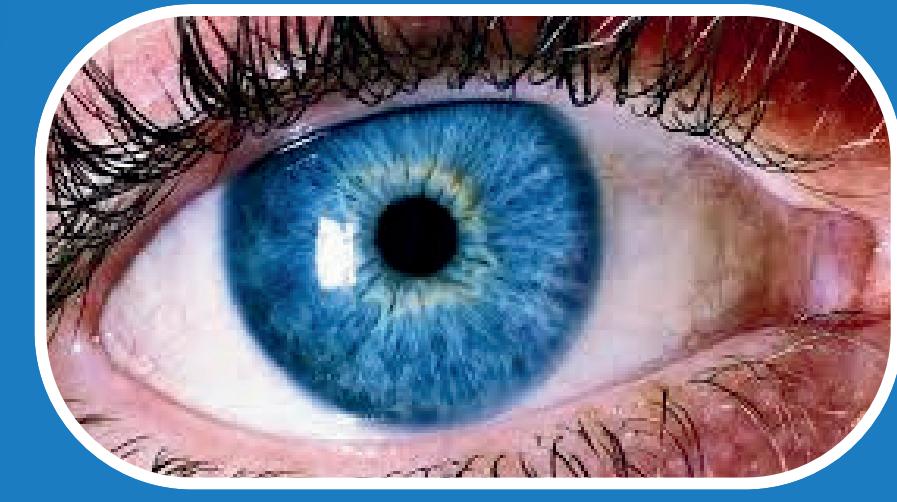


# EyeEmpower

A Computer Vision Project

To enable the blind and visually impaired to shop



## Problem

- 285M visually impaired people worldwide.
- Independent shopping is a major challenge.
- Existing apps (Seeing AI, OrCam):
  - Require constant internet.
  - Lack real interaction.



## Key Features

- OCR → Reads Arabic/English product labels.
- TTS → Converts text to speech.
- Haptic alerts for obstacles and notifications.
- Crowd density detection using YOLO.
- Forgotten item reminder.
- Health app integration (diet monitoring).

## Solution

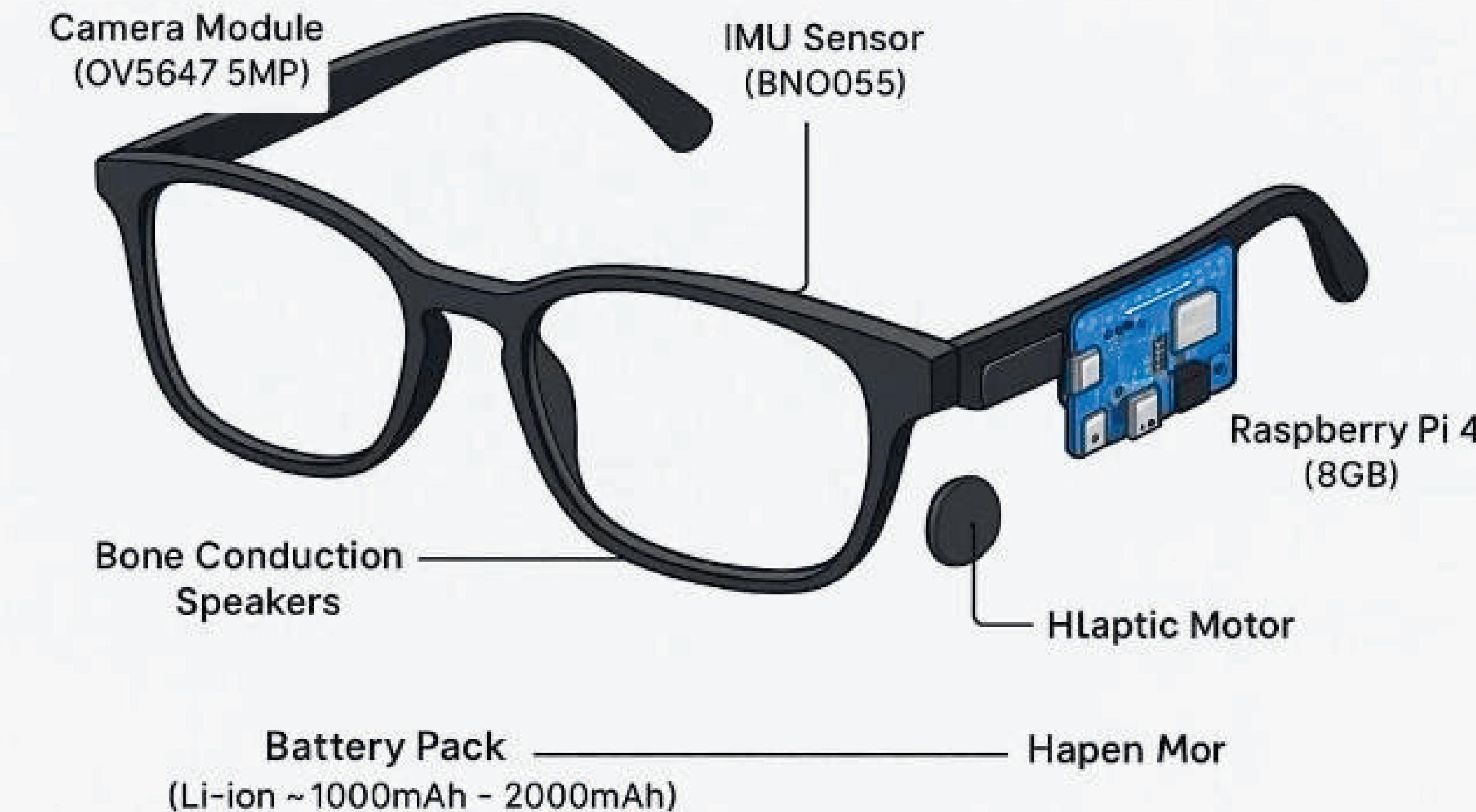
- Works offline on Raspberry Pi.
- Affordable, wearable, and user-friendly.
- Combines computer vision + audio + haptic feedback.
- Interactive correction via touch/voice

## Impact

- Enables independent shopping.
- Promotes inclusion & accessibility.
- Reduces reliance on external help.
- Scalable with significant social impact

## ProtoType

### HARDWARE DESIGN FOR SMART GLASSES



## Team

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