**Possible methods for object detection:**

* Full object detection using Yolo or another method -> this could include signage etc
* Shape/edge detection -> <https://www.thepythoncode.com/article/detect-shapes-hough-transform-opencv-python#:~:text=The%20Hough%20Transform%20is%20a,computer%20vision%20and%20image%20recognition>.

**Triangulation:**

Least squares minimisation problem:

<https://www.sciencedirect.com/science/article/pii/S1077314297905476>

Optimised Method

<https://arxiv.org/pdf/1907.11917.pdf>

Introduction and error correction

<https://www.uio.no/studier/emner/matnat/its/nedlagte-emner/UNIK4690/v16/forelesninger/lecture_7_2-triangulation.pdf>

Use CPython & multithreading for speed:

<https://github.com/python/cpython>

Questions:

* How to detect objects/ how to decide where to measure them?
* Do we need a gyroscope for error correction? (Build a calibration script/system that runs each time the user puts the glasses on)
* Inside or outside focused (reading signage and alerts vs unknown environment detection)

3D sound:

I suggest we build a 3d sound mixer **package/import** that can take the live input can convert it



Possible Additional Features:

* The audio path through with a mic built into the headset
* Google maps api input to allow for direction overlay

Presentation:

1. The idea & technology
2. How it’s a robot
3. Market/the need