NextVision – Sacaci Alin-Cosmin

Sight is the most important sense humans have, which is why people with sight impairment have difficulties performing simple, day by day activities. To combat this problem, there are many applications developed by people all around the world that use different technologies to try and make it easier and safer for these people to live without constant help from others.

As expected, most of the applications are mobile, so people can use them anywhere. The main technologies used for this specific problem are voice recognition, speech to text and text to speech conversions, image processing, the use of services like GPS, maps and other information providers. The text and visual data are processed by an AI to give the user the information they need through a simple and easy to use interface.

The range of applications is wide and depends on the severity of the person’s visual problems. An example of a simple application is **Magnifying Glass with Light***,* which is using the camera and flashlight to magnify text or objects. The simple features all work well with VoiceOver and it’s great for someone with a low level visual impairment for things like reading menus or receipts.

<https://apps.apple.com/us/app/magnifying-glass-light-digital-magnifier-flashlight/id406048120>

For someone with more severe visual impairment, a more complex application that uses an AI may be more helpful. An example would be **iDentifi**, which uses artificial intelligence to analyze a photo and give a quick description. It’s able to recognise objects, brands, colours, facial expressions, handwriting and text, and delivers an audible description of the image’s contents to the user.

<https://apps.apple.com/us/app/identifi-object-recognition-for-visually-impaired/id1135223189>

These are just examples of what can be done. There are a lot more real life scenarios that require safe solutions for sight impaired people, especially for outside usage.

Here is a book that covers this specific topic:

<https://www.researchgate.net/publication/321319458_Designing_Mobile_Applications_For_Visually_Impaired_People>