

AAGS- Wheeler

-The Only Disability In Life Is A Bad Attitude

A virtual assistant for the elderly & handicapped – a containerized and unified solution to tackle some of the daily challenges faced by millions worldwide.

What Is Wheeler ?

A central promise of technology and all its advancements is to bring a better world through solving inherent problems of human society and its individuals. The predominance of smart devices is so obvious that it is now impossible to imagine a world without them around. However, there appears to be a lack of consideration regarding accessibility in contemporary technology, with the industry being heavily biased towards people without impairments of any kind. Nevertheless, things like a smaller market size and weak representation in government and industry are no longer viable justifications for a pervasive tendency towards the aforementioned specific catering. Apart from non-technical impediments, there are also some major technical challenges in providing these people with high quality services on par with natural human capabilities. Wheeler aims to capitalize technology and make a difference in the realm of physical impairment.

Ordinary tasks become difficult and make the disabled elderly less independent. Simple things such as moving around or recognizing who they're conversing with become exceedingly difficult. We believe we can address these issues using a cheap device we call 'Wheeler'. Wheeler is an **intelligent digital assistant** who can understand requests of its user via **voice commands** and can provide thoughtful responses through its voice while also performing various functions. Wheeler tries to find answers to questions by gathering information from the environment that it sees through a high-quality built-in camera. The concept for Wheeler is a simple one, with the aim to make it as seamless as possible to integrate into daily lives. Hence, we want to incorporate the device as an **attachment to regular wheelchairs** to provide a nice viewpoint for the camera while minimizing impedance with the user's activity. Essentially, the device is intended to be a third leg for the user and make tasks, simple or complex much easier to deal with while also eliminating the need for smart phones.

Why Wheeler ?

People living with disabilities – whether hidden or visible – have hopes, dreams and frustrations just like everyone else. There are many struggles people with disabilities go through.

Hence, Wheeler, acting as a **plug and play** instrument provides features which help the user:

- 1) **Navigate** to and through unknown routes without having someone else push the wheelchair for them.
- 2) **Recognize** who's in front of them and whether he/she is known to the user from having met before.
- 3) **Eliminate** the need for a smart phone by substituting it with the device itself, say- weather information, reading the news, order food online.
- 4) **Remind** about important "things to do" by automatically classifying "heard" information as important or trivial.
- 5) Find out **doctor numbers** near them.

Our Target Audience?

- Handicapped people: **One billion people** in the world's population face some sort of disability.
- Elderly people: **617 million people** in the world's population consists of elderly people (aged 65 and over).
- Handicapped as well as elderly: About **250 million people** which is about 46% of the elderly face some sort of disability in their lives which means there's almost a 50% chance that 2 out of 4 people sitting in a room will fall under his category in the future.

Our product will be useful to all three of these target audiences while being especially useful to the third category.

Why is Wheeler better?

Wheeler empowers users with a distinctive set of features that other competitors are nowhere close to.

It's all about the unique **user experience** that Wheeler delivers. Wheeler is supposed to be like a buddy who is there to support and guide its users. It is a new platform and isn't comparable to any other existing solution.

Wheeler is fully **voice controlled** and hence, with Wheeler users can get what they are looking for just by asking for it.

Wheeler makes it possible for users to ask for help from their friends without them being around. The Remote Assistance feature of Wheeler allows trusted friends to connect to the camera and see the world through its lens. Therefore, they can guide the user remotely.

According to our estimations, the **cost** of Wheeler is a lot lower than a high-end device like iPhone. Currently, seeing AI and such technology is only available on iPhones and such devices. This makes the smart phones less accessible as a solution due to the high cost associated.

