

**September 2024**



**Edition 102**

**Editor's Desk**

Dear friends,

“Technology like art is a soaring exercise of the human imagination.”

– Daniel Bell

Happy Reading !

Regards,

Bhavna Botta

<http://www.connectspecial.in/>

## Inclusive Designs

### EyeCane by Cellico

EyeCane are smart glasses for people who suffer from age-related macular degeneration (AMD), the leading cause of vision loss. The macular area is lost and degenerates due to various factors related to aging and resulting in loss of function. As you get older, your chances of getting it increase.

The EyeCane is an assistive technology solution for age-related macular degeneration (AMD). The condition causes degeneration of the vision, which can make everyday activities like reading and recognizing faces difficult.

EyeCane is designed to help people with AMD rediscover lost vision. The smart glasses use a 4K camera and mobile app to capture, process, and display video to the user in real time. The captured images are then shown back to the user with an augmented reality display in Full-HD. This process moves the central vision to the peripheral field of view, allowing retina disease patients to recover their lost vision and regain independence. The clear, live images are moved from their impaired area to their viewable peripheral area, enabling sight.

<https://www.cellico.com/>

Picture shows a picture of a lady and a child, the central area of a picture is black and its clear image of the child on the periphery



## Innovative Ideas

### Naqi Neural Earbuds- An Upcoming Product

The Naqi Neural Earbuds, ready for manufacturing partners, allow users to command, control, and navigate computers, digital devices, smart home devices, robots, and wheelchairs without voice, touch, screens, or cameras. They can control almost anything digital.

The neural earbuds create a new silent and invisible input methodology for elderly and disabled people. They are a safe, non-invasive alternative to brain implants.

Our **hands-free, voice-free, and screen-free** Human-Machine Interface represents a major paradigm shift, offering a powerful new command and control capability that no other earbud or wearable offers. NAQI provides users with the power to control their PCs, Macs, and mobile devices in a manner that rivals brain implants for those who can move above the neck. A product design to be followed!

<https://www.naqilogix.com/>

### **BrainPort Vision Pro**

The new BrainPort Vision Pro is a 2nd generation oral electronic vision aid that provides electro-tactile stimulation to aid profoundly blind patients in orientation, mobility, and object recognition as an adjunctive device to other assistive methods such as the white cane or a guide dog.

BrainPort Vision Pro translates digital information from a wearable video camera into gentle electrical stimulation patterns on the surface of the tongue. Users feel moving bubble-like patterns on their tongue which they learn to interpret as the shape, size, location and motion of objects in their environment. Some users have described it as being able to “see with your tongue”

The BrainPort Vision Pro vision aid is a headset that contains a small video camera, user controls, a rechargeable battery, and a tongue array. The headset is fully adjustable and available in 3 different sizes to accommodate most users.

The camera works in a variety of lighting conditions and has an adjustable field of view. The tongue array contains 394 electrodes and is connected to the headset via a flexible cable so it can't be dropped and lost. When in use, white pixels from the camera are felt on the tongue as strong stimulation, black pixels as no stimulation, and gray levels as medium levels of stimulation.

<https://www.wicab.com/brainport-vision-pro>

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