GLASS
by Google

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Introduction

- The intended purpose of Google Glass would be the hands free displaying of information currently available to most smartphone users.

Overview

- Project Glass was started by Babak Parviz

- Glass is being developed by Google X Lab

- Use 4G technology

- Communicate with mobile phones through Wi-Fi

- Display content on video screen as well as respond to voice command of the user.

Technologies Used

➢ Wearable Computing

➢ Augmented Reality

➢ Smart Clothing

➢ Eye tap technology

➢ 4G technology

➢ Android technology

Wearable Computing

- Worn by the bearer under , with or on top of clothing

- Developed for general or special purpose information technologies and media development

Augmented Reality

- The basic idea of augmented reality is to superimpose graphics, audio and other sensory enhancements over a real-world environment in real time

Smart Clothing

- It is a combination of new fabric technology and digital technology.

- The clothing is made with new signal-transfer fabric technology installed with digital devices.

Eye Tap technology

- EyeTap is a device that is worn in front of the eye that acts as a eye to record the scene available to the eye as well as a display

4G Technology

- 4G is the fourth generation of cell phone mobile communications.

- 4G Technology is basically the extension in the 3G technology with more bandwidth and services offers in the 3G.

- This system provides mobile ultra broadband internet access with data rates of 300 Mbps

Android

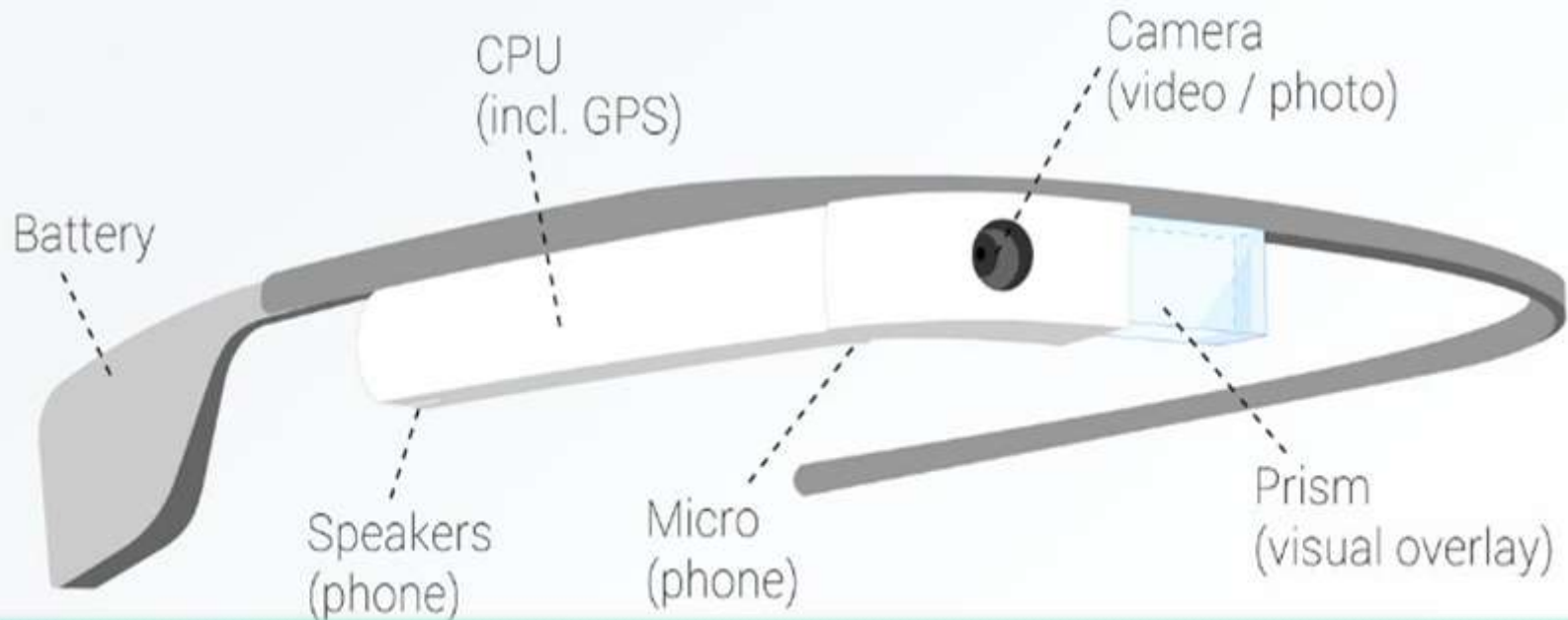Android is a Linux based operating system for mobile devices such as smart phones and tablet computers
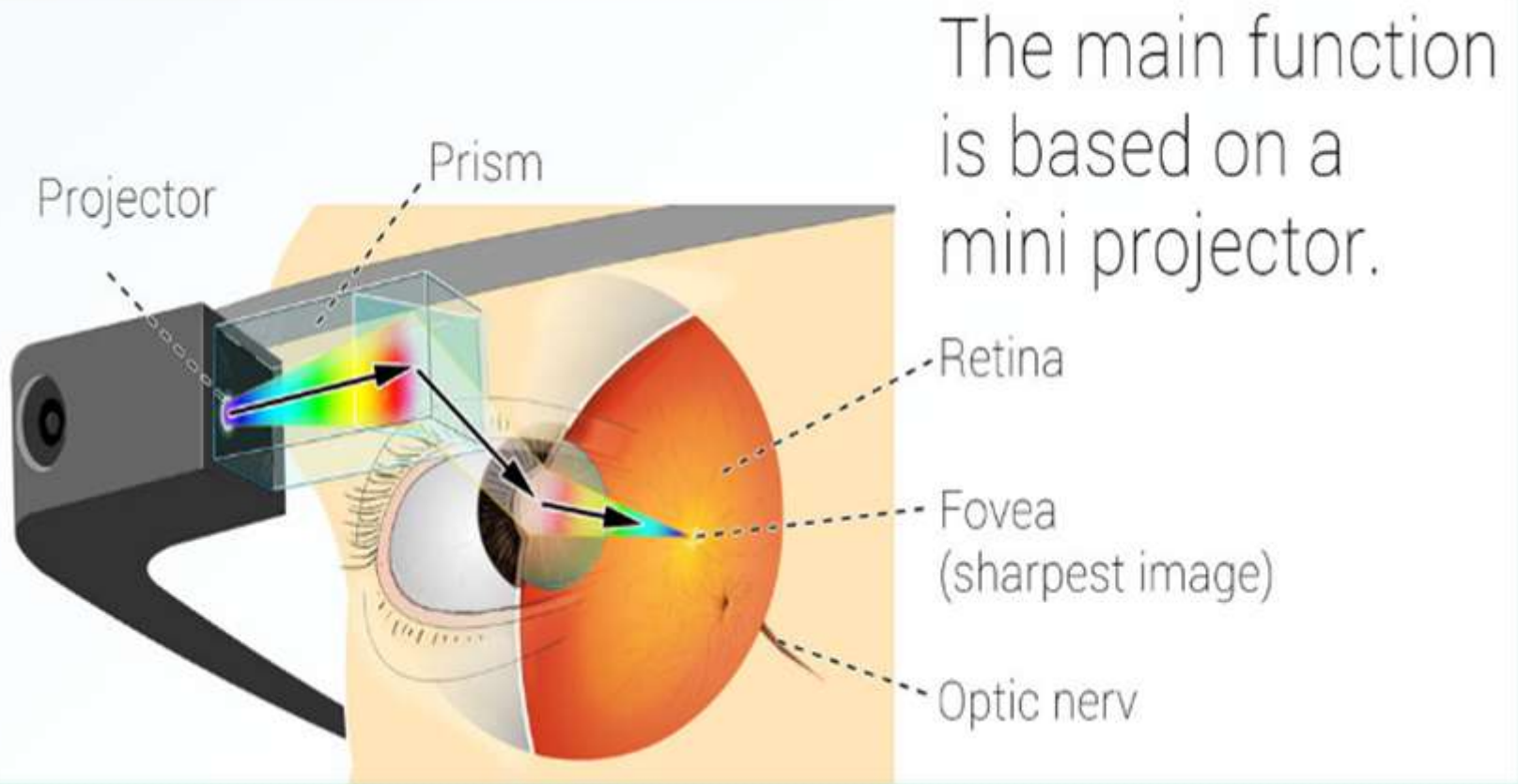
Working

How Google GLASS works

Why can you see a sharp image?

Infographic by M. Missfeldt
www.brille-kaufen.org

CPU
(incl. GPS)

Camera
(video / photo)

Battery

Speakers
(phone)

Micro
(phone)

Prism
(visual overlay)

Working(cont.)

Projector

Prism

The main function is based on a mini projector.

Retina

Fovea (sharpest image)

Optic nerv

Technical Specifications

➢ **Fit**
- Adjustable nosepads and durable frame fits
- any face.
- Extra nosepads in two sizes.

➢ **Display**
- High resolution display is the equivalent of a 25 inch high definition screen from eight feet away.

➢ **Camera**
- Photos - 5 MP
- Videos - 720p

➢ **Audio**
- Bone Conduction Transducer

Technical specifications(cont.)

➤ **Connectivity**
- Wifi - 802.11b/g
- Bluetooth

➤ **Storage**
- 12 GB of usable memory, synced with
- Google cloud storage. 16 GB Flash total.

➤ **Battery**
- One day of typical use. Some features, like
- video calls and video recording, are more
- battery intensive.

➤ **Charger**
- Included Micro USB cable and charger
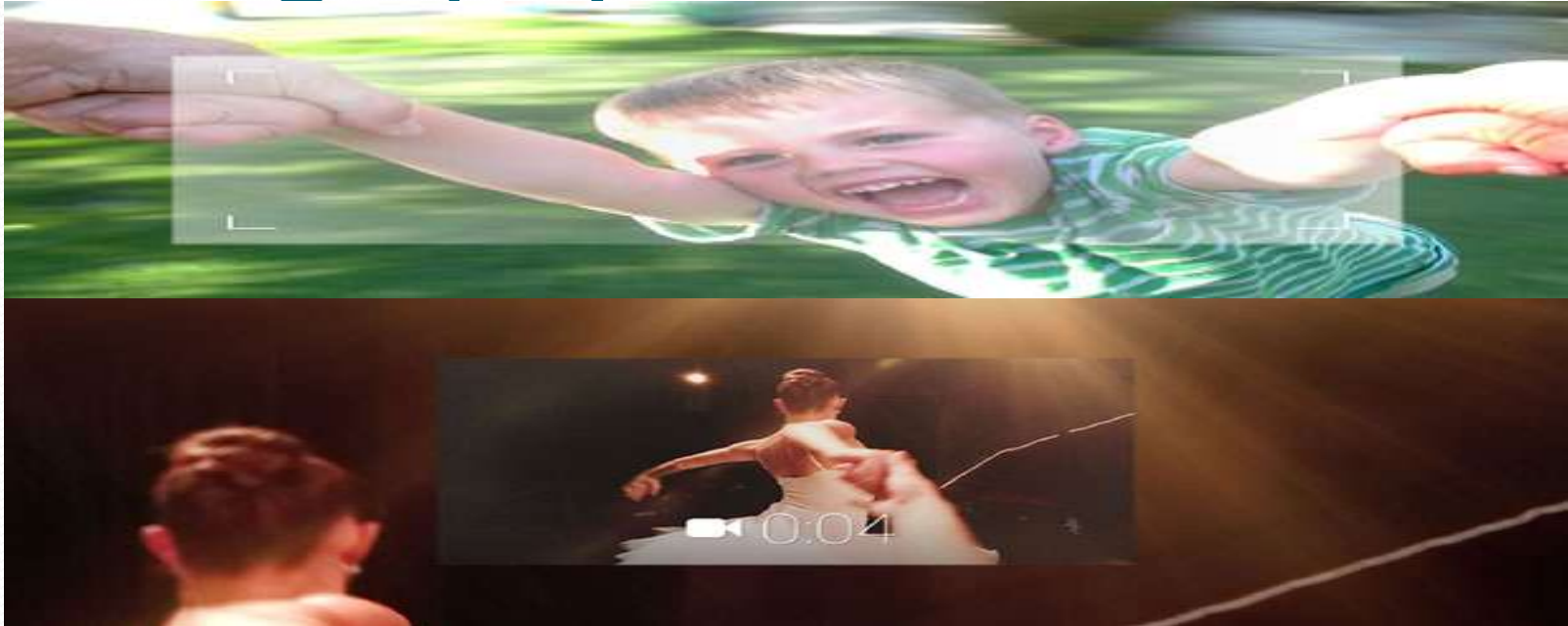
GLASS

Compatibility
Any Bluetooth-capable phone.

The MyGlass companion app requires Android 4.0.3 (Ice Cream Sandwich) or higher. MyGlass enables GPS and SMS messaging.
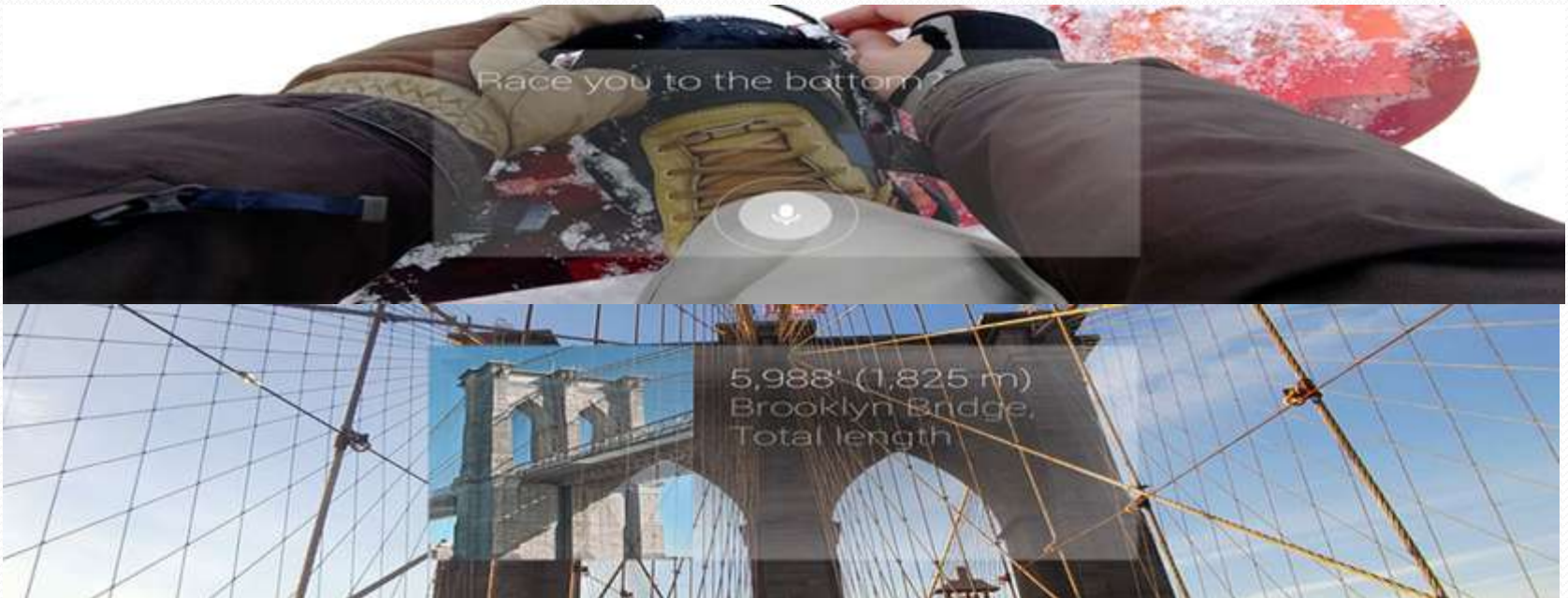
Features of Google Glass

Photography and Video

- You just say word and Google Glass will take a picture or record a video.

- You will never have to touch the hardware.

- The photos and videos will be stored on the 4GB flash memory of the device, and can also be shared on social networking websites

Send message and Google search

- Google Glass will show you text messages you receive and allow you to reply to them via voice commands.

- If you are in the habit of Googling things a lot. You simply need to ask a question and the device will pull the answer from the internet

Google translate

- Google Glass translate a phrase or sentence from one language to another .

Google maps
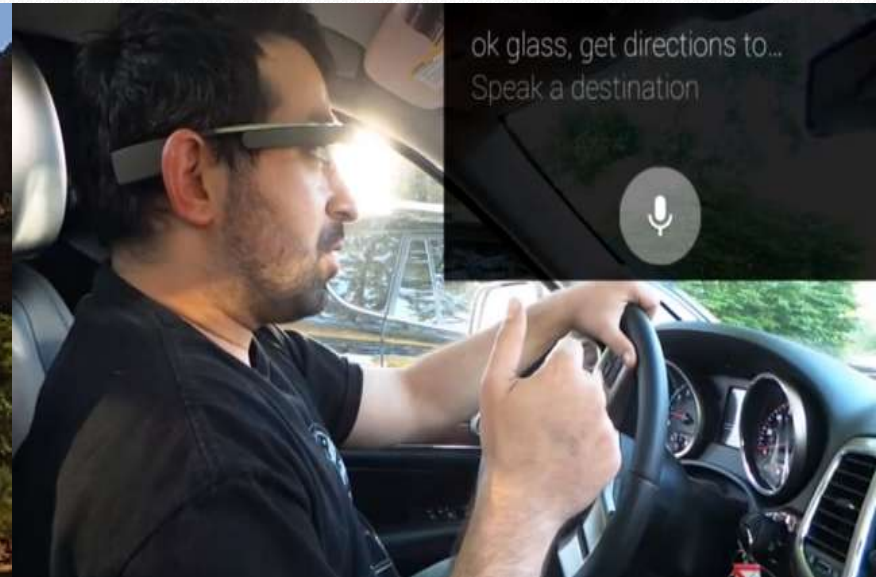
Lost? No problem, you have your very own super GPS navigating device to guide you along in the right direction.

Advantages of Google Glass

- Easy to wear and use.
- Sensitive and responsive to the presence of people.
- Fast access of maps, documents, videos, chats and much more.
- A new trend for fashion lovers together being an innovative technology.
- A spectacle based computer to reside directly on your eyes rather than in your pouch or pocket.
- A useful technology for all kinds of handicapped/disabled people

Disadvantages of Google Glass

- Can be easily broken or damaged. Users will have a tough time taking care of it.

- It may lead to accidents while driving.

- Privacy of people may breach with new glasses