

DIGITAL Jewellery:-Fashion Meets Technology

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Abstract - Jewellery has been a fascination of all the ages. In recent year the researchers has tried to bridge the gap between the fashion and technology. The whole concept behind this research paper is to have communication by means of wireless device. This papers reveals the concept of pint size wearable device and specifies the new technology which can be used in health care service in covid-19.

Key Words: Digital Jewellery, wearable computer, miniature device.

1. INTRODUCTION-

Digital jewellery is a fashion jewellery with an embedded intelligence. It is a wearable computer device. Instead of a single device, cell phone will be broken up into their basic component. Motive is to shrink computer device and increase computer power. It is a miniature (small) device that can be worn on top and under clothing without any discomfort. Digital jewellery has a tiny processor and unique identifier that can interact with a local sensor.

2. Component of Digital Jewellery-

2.1) Digital Jewellery Earring:-Speakers are embedded into these earring. It can be used as phone receiver.



Fig 2.1.Earring

2.2) Digital Jewellery Necklace:-User will talk into the necklace's embedded microphone. They transform the information in the form of signals. It consist of signals by it works. It can be mainly used by bluetooth device.



Fig 2.2 .Necklace

2.3) Ring:- Ring is fitted with LED's to denote the incoming call. This is the most interesting component programmed to flash different color lights. Along with the incoming calls flashing, it can also tell you that email is piling in your inbox.



Fig 2.3.Ring

2.4)Braclet:-It is equipped with a Video Graphic Array(VGA) display. And this wrist display could be used as a caller identifier that flashes the name and the number of the caller.



Fig 2.4.Braclet

2.5) Smart Watch:- It is a wearable computer in the form of wrist watch. It provide a local touch screen interface for daily use. It can be used as safety device whereby children can call in case of emergency. The device is commonly colourful and made of plastic.



Fig 2.5.Smartwatch

3. Display Technologies-

The digital jewellery for instance, every alphabet and number system has found representation within the electronic realm and Dot matrix. It is mainly used to display chinese and Japanese and other character set as can the alternative display for LCDs(Liquid Crystal Display) also can be used, as often find in watches. Digital jewellery can be made in various size and shapes with a variety of materials ranging from plastic and metal to rubbers and glass. This could range from LED 7Segment, 16-Segment, dot-matrix and other programmable LEDs device to LCDs, OLEDs and other display device.

alphanumeric or graphic Display Types



Fig 3.1 Display Technologies

4. Application-

4.1) ViriMASK:-

ViriMASK can be used in Digital Jewellery. It could be game changer for healthcare worker, airport worker and people in preventive quarantine. The aim is to hack the pandemic and tackle the problem of N95 mask. Many people are wearing facemasks to avoid breathing airborne coronavirus particles, and to keep from touching their noses and mouths. However, even N95 masks can't fully block tiny virus particles and can't kill the virus (two masks under development in Israel aim to do that). Any blocked viral particles stay on the mask's surface and pose a hazard when handled and thrown away. ViriMASK is strapped around the head, covering the eyes with a see-through vision and the nose and mouth with a filtering mechanism. The device can be washed and reused. The filters must be replaced after 12 hours of use and disposed into a special envelope containing disinfectant. It prevent people from home isolation. People with facial deformation or significant may able to order a custom 3D printed ViriMASK.

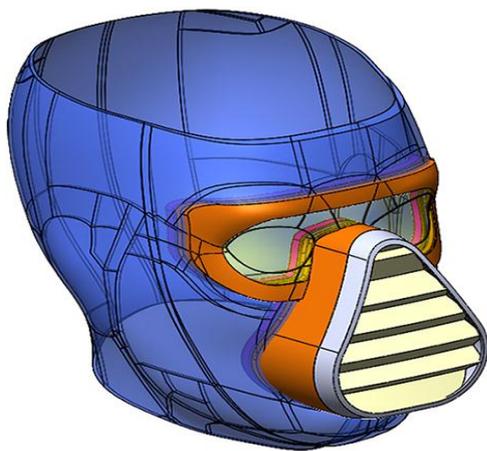


Fig 4.1 ViriMASK

4.2) Pulse Oximeter:-

It can be used in Digital Jewellery as wrist Pulse oximeter. And it can be used as bractet. It is developed to help clinicians during covid-19 pandemic. It uses oxygen saturation measurements from a pulse oximeter to determine when oxygen support is needed. The tool was created as guidance for frontline providers in low-resource settings working with patients with respiratory compromise and suspected or confirmed COVID-19. It is used for testing

those who have disease or suspected having it. It is used to check Blood oxygen level for those who has symptom such as shortness of breathing.

5. Advantages:-

1. It provides security.
2. As computer device are embedded so we don't having to carry cells or computer instead the device of Digital jewellery can be easy carried anywhere.
3. Sizzling outlook to the user.

6. Disadvantage:-

1. Display is very small.
2. The rays may be harmful.
3. Cost is high.
4. Charging capabilities.

7. CONCLUSIONS-

The basic idea behind this paper is to know how fashion meets technology. Increase computer power and shrink computer device and make those device usable and fashionable. In these paper we merged the fashion jewellery with embedded intelligence in wearble device which can help in health care in covid-19.

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