

## DoubleMe VR avatar creator

Developers of social VR applications have held back on allowing users to import lifelike representations of themselves thus far. VTime, for example, requires users to design a cartoonish avatar of themselves. In part this is due to ethical implications of putting real people into virtual worlds. It is also due to a phenomenon inherent to both robotics and VR known as “uncanny valley”, where things – particularly people – which look almost, but not quite, like things from the real world, can cause confusion, discomfort and nausea.

DoubleMe’s technology addresses the second problem, if not the first. It creates stunningly lifelike representations of real people from a simple 2D camera setup, intended for both VR and AR applications.

## Beddit sleep tracker

A thin, sensor-laden film designed to go between your mattress and bedsheet, enabling you to track sleep patterns without wearing a smart watch or fitness strap. The device integrates with Apple’s Watch to give readouts on sleep quality, time taken to fall asleep, night time movements, breathing and snoring. Algorithms are then used to suggest changes to sleeping habits which should make a good night’s rest more achievable.



## ACHIEVERS OF THE YEAR

S NO	NAME	SEMESTER	EVENTS	PLACE	PRIZE
1	1 Sisir 2 Sujit	V	Junkyard Wars	Christ University, Bangalore	II
2	1 Preethi R 2 Gowda	VII	Rapid Fire Round for Computers	MGIT, Hyderabad	I
3	Vatan Yadav	VII	Circuit design	HKBK, Bangalore	II



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# NEW HORIZON COLLEGE OF ENGINEERING

## Usability & Human Computer Interaction



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

UHCI / Q4 / JUNE 2015



## WEARABLE TECHNOLOGY: Next Frontier for Human Computer Interaction



Wearables, The Internet of Things and Smart Materials – you have probably come across these terms several times.

## The Future of Wearable Technology: Smaller, Cheaper, Faster, and Truly Personal Computing

For the past few years, industry specialists have been predicting the death of the personal computer. I look at it a bit differently—the personal computer is not dying, but is becoming even more personal. It is now something you're going to wear—in your clothing, jewellery, shoes, glasses, watches, and even on your skin.

The burgeoning field of wearable technology is hitting the mainstream, illustrated by a new [ad campaign](#) from Samsung that employs Dick Tracy, Captain Kirk, and a line-up of other comic and science fiction characters to introduce the new [Galaxy Gear](#) smartwatch.

Wearable technology is helping drive the [Internet of Everything](#) (IoE)—and changing the way we live—by connecting people in new and different ways. Today, let's go a little deeper, and explore some of the ways that today's wearable technology might evolve.

## Google Glass



which superimpose computer graphics over the actual world you can see – is thought to be a few steps behind virtual reality – in which computer graphics fill your entire field of vision.

Google's version - Google Glass was not immediately successful when it was launched a couple of years ago, mainly because the software support wasn't quite ready. But other major companies are now signaling that they are ready to take the plunge. Sony's Smart Eyeglass offers full binocular AR – so graphics can potentially appear seamlessly integrated with the real world, instead of the superimposed, HUD-like effect of earlier devices.



## Samsung Entrim 4D headphones



Potentially one of the biggest barriers to VR gaining mainstream consumer acceptance is the problem of motion sickness. When you're in VR, your brain is often tricked into thinking it is moving when in fact your body is standing perfectly still. This can create a nauseating effect similar to travel sickness, and no one yet really knows how many people will be affected by this. Samsung's novel solution is its 4D Entrim headphones, which use a method known as Galvanic Vestibular Stimulation to trick the body's vestibule system, located in the ear, into thinking it is actually experiencing motion.

## 8 Game-Changing Innovations in Wearable Technology



## MAINTOOL Smart watch strap

Smart watches are becoming a more commonplace sight, and not just on the wrists of techies, gadget fiends and geeks. There's still a subset of customers, however, who are unlikely to take to them any time soon – hardcore luxury watch fanatics.

Main tool claims to have come up with the answer to persuading this market to "smarten themselves up" – a watch strap that transforms any timepiece into a smart watch. An array of sensors and monitors including a pedometer, heart rate monitor, calorie counter and thermometer to measure skin temperature mean any watch can be converted into a smart watch with a simple swap of the strap.



- Notifications
- Call rejection  
Emergency SMS
- Alarm
- Navigation through vibration
- Heart rate
- Footsteps
- Phone loss prevention
- Calories burned
- 7+ days of battery life
- 14+ days of data storage
- Waterproof IP67
- Magnetic charging