

## Wearable Computing

### Definition

*A wearable computer is a small computing device designed to be worn as an accessory on a user's body, for example, on the wrist.*

Wearable computers can have specific uses, such as fitness trackers, or have a wide array of features, such as a smartwatch with many “smart” functions similar to those found on a smartphone.

More advanced wearable computing devices allow users to read and respond to emails, send text messages, browse the web, view photos or video, and view social media notifications.

Wearables are typically worn on the wrist (like smartwatches), strapped to the arm, on the head, or hung from the neck.

### Examples of wearable computers:

- **Smartwatches** – modern smartwatches feature a local touchscreen interface for daily use. Software may include digital maps, calculators, personal organizers, different kinds of watch faces. They typically have WiFi/Bluetooth connectivity to pair with a smartphone and cooperate with a smartphone app to carry out certain functions.
- **Fitness tracking bands** – these devices are strapped around the wrist and have a screen showing vital fitness and health information, such as heart rate, the number of calories burned, and the total number of steps one has done in a day.
- **Smart glasses** – smart glasses, such as the one Google developed known as “Google Glass” have the potential to provide an augmented reality experience for users.
- **T-shirts** - There are also some wearable technology T-shirts, often displaying either a message or a .gif type image that moves, such as an equalizer for music. These serve no function other than to look stylish and fashionable.

### There can be issues with wearable technologies:

- They are easily subject to moisture, especially fitness devices, and this could affect the operation of the technology. This could break devices if they are not protected or built for dealing with it. They need to be carefully designed and be able to deal with this potential issue, which may increase the cost.
- Another problem is with connectivity. Using Bluetooth and wireless networks to send data back and forth does mean that people may try to hack the connection and gain access to private information and documents.