**IOT**

Internet of Things, or IoT is a concept that is rapidly being made use of in today’s wireless telecommunication. It is the network of devices, vehicles, and home appliances that contain [electronics](https://en.wikipedia.org/wiki/Electronics" \o "Electronics), [software](https://en.wikipedia.org/wiki/Software" \o "Software), [actuators](https://en.wikipedia.org/wiki/Actuator" \o "Actuator), and [connectivity](https://en.wikipedia.org/wiki/Internet_access" \o "Internet access) which allows these things to connect, interact and exchange [data](https://en.wikipedia.org/wiki/Data" \o "Data). IoT involves extending [Internet connectivity](https://en.wikipedia.org/wiki/Internet_access" \o "Internet access) beyond standard devices, such as desktops, [laptops](https://en.wikipedia.org/wiki/Laptop" \o "Laptop), [smartphones](https://en.wikipedia.org/wiki/Smartphone" \o "Smartphone) and tablets, to any range of traditionally dumb or non-internet-enabled physical devices and everyday objects. Embedded with technology, these devices can communicate and interact over the [Internet](https://en.wikipedia.org/wiki/Internet" \o "Internet), and they can be remotely monitored and controlled.

The idea of it is the widespread presence around us of a variety of objects or ‘things’ that can intercommunicate with each other to achieve common goals.

Here, in IoT workshops conducted by KRS, we help people get acquainted with this novel paradigm and its implementation using Arduino and Raspberry Pi.

**EMBEDDED SYSTEMS**

An embedded system is a [programmed controlling and operating system](https://en.wikipedia.org/wiki/RTOS" \o "RTOS) with a dedicated function within a larger mechanical or electrical system, often with [real-time computing](https://en.wikipedia.org/wiki/Real-time_computing" \o "Real-time computing) constraints. It is embedded as part of a complete device often including hardware and mechanical parts.

Ninety-eight percent of all [microprocessors](https://en.wikipedia.org/wiki/Microprocessor" \o "Microprocessor) are manufactured to serve as embedded system component.These range from portable devices to large stationary installations and largely complex systems.

While students get a lot of theoretical knowledge in their classrooms, getting practical experience is difficult. So, here at workshops organized by KRS, skilled members teach hands-on skills and help enhance participants’ current knowledge of concepts, techniques and methods.