BYTE QUEST

Vasavi College Of Engineering

Department of Computer Science and Engineering

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Contents:

Byte Quest is the article published by the CSE department of Vasavi College of Engineering regarding the latest innovative technologies and software that have been emerged in the competitive world. The motto of this article is to update the people regarding the improvement in technology. The article is designed by the active participation of students under the guidance of faculty coordinators.

Good, bad or indifferent if you are not investing in new technology, you are going to be left behind.

-Philip Green

Once a new technology rolls over you, if you're not part of the steamroller, you're part of the road.

-Stewart Brand

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E BALL TECHNOLOGY

The E-ball concept, whose design is given by Apostol Tnokovski, is a sphere shaped computer which is the smallest design among all laptops and desktops. This computer has all the features like a traditional computer such as keyboard, mouse, largescreen display etc., E-ball is designed to be placed on two stands, opens by simultaneously pressing and holding the two buttons located on each side.This concept features a laser keyboard that can be activated by pressing the particular button.E-ball is small as it is only a 6 inch diameter sphere. It has a 120*120mm motherboard, around 350-600GB of Hard Disk Drive, a 5GB RAM and has two 50W speakers.

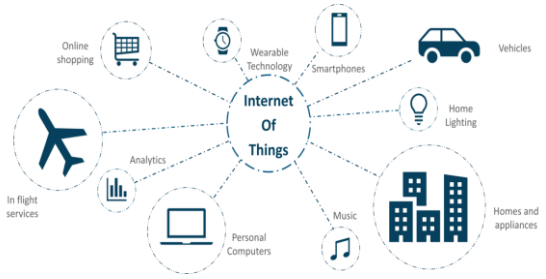
When you want to carry it around you can easily “pack it” into a ball.This is a futuristic concept and this is how future computers would look like.

SATHWIKA (CSE-C 2/4)

IOT

Internet of Things, preferably known as IoT, refers to interrelated computing environments, digital and mechanical devices without any human intervention. IoT is component of billions of physical devices around the world that are now connected to the internet, all collecting and sharing data.

IoT is essentially a platform where embedded and electronic devices are connected to the internet, so they can collect and exchange data with each other device across the computerised world. It enables devices to interact, collaborate and, learn from each other’s experiences just like humans do.



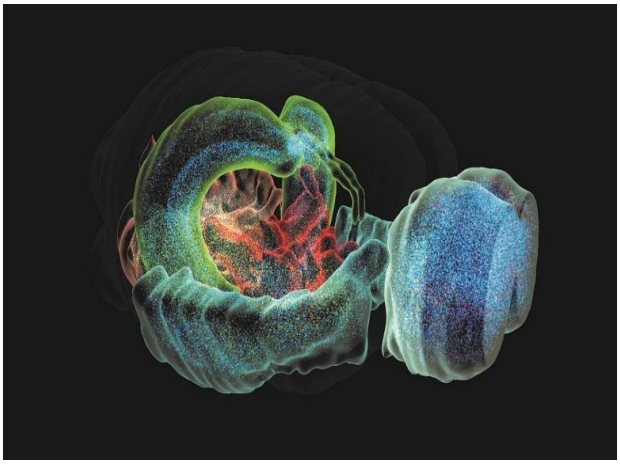
Traditional fields of embedded systems, wireless sensor networks, control systems, automation (including home and building automation), and others all contribute to enabling the Internet of things.

B. SOWMYA (CSE-C 2/4)

THE BLUE BRAIN

The Blue Brain Project started by Brain and Mind Institute of Ecole Polytechnique Federale de Lausanne (EFPL) in Switzerland. The project which started with a molecular level simulation that enables studying the effects of gene expression in 2005 by Henry Markram, an Israeli neuroscientist has over the years developed into the whole of cortex of the mouse brain as said by one of the computational neuroscientists in 2019. This project is expected to complete by 2023. The main aim of this project is to replace use of mammalian brains in the simulation labs for experimental, theoretical and clinical neuroscience purpose. This project would be first of its kind to provide detailed digital brain.

As said, it resembles mouse cortex its structure, but is made such that it resembles human cortex in function. Therefore, doing all the functions including tendency to think, take decisions based on experiences and also respond like a human. This Brain comes with a huge amount of storage capacity and its processing power enables it to become an interface between human brain and artificial brain. It has a software named NERON which is written in C, C++ and FORTAN. This software has algorithms that are defined based on age, breed of the organism to be studied. The cells of the Blue Brain are then studied using this algorithm. the data collecting software is designated as Blue Brain Project Software Development Kit, a C++



library which provides API documentation and can run on any modern operating system, including Unix variants. It uses CMake to create a platform specific build environment.

Thus, Blue Brain can enable us to store our knowledge, intelligence irrespective of we being alive or dead. The technology brought us this far that even after the death of the man, the Blue Brain keeps him alive.

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