



## BYTE QUEST

Vasavi College of Engineering

Department of Computer Science and Engineering

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Byte Quest is the article published by the CSE dept 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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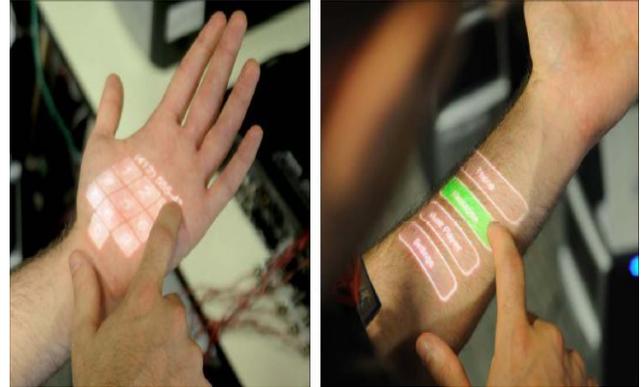
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## SKINPUT-ADVANCE INPUT TECHNOLOGY

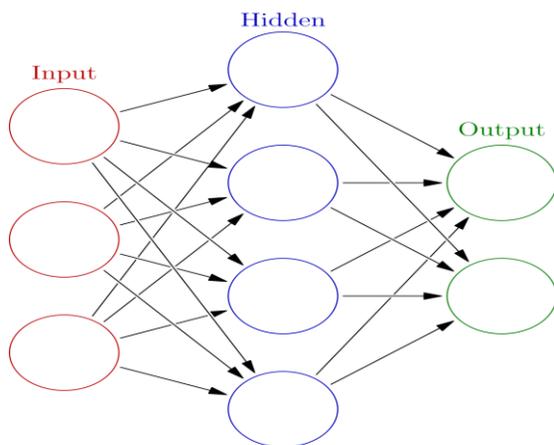
Skinput is a technology that appropriates the human body for acoustic transmission, allowing the skin to be used as an input surface. Skinput is a new skin-based interface that allows users to use their own arms and hands as touch screens by sensing different ultra low-frequency sounds that are generated when knocking various parts of skin. The feature of providing input using this projection is a boost. Skin put uses acoustic information, to capture this information a wearable armband that is non-invasive and easily removable is employed. The scientists explain that the changes in bone density, mass, and size along with the filtering effects from joints and soft tissues mean various skin spots are acoustically discrete.

Skin put sensor and the processing techniques used to segment, analyze, and classify bio-acoustic signals are studied in this section. The working is based on acoustic signals through density of tissues.



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## NEURAL NETWORKS



An Artificial Neural Network (ANN) is an information processing paradigm that is inspired by the way biological nervous systems, such as the brain, process information. The key element of this paradigm is the novel structure of the information processing system is the novel structure of the information processing system.

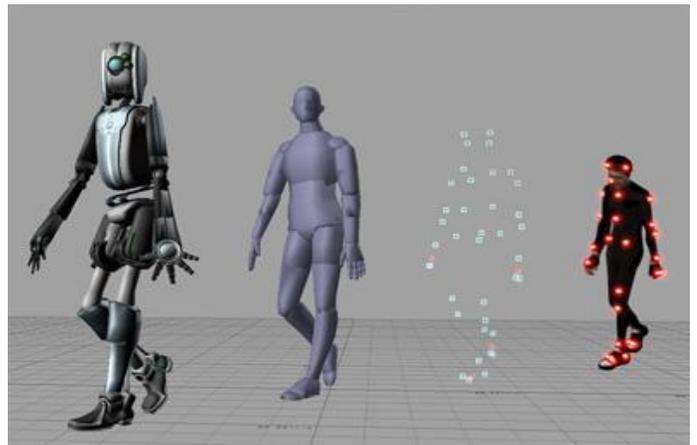
It is composed of a large number of highly interconnected processing elements (neurons) working in unison to solve specific problems. ANNs, like people, learn by example. An ANN is configured for a specific application, such as pattern recognition or data classification, through a learning process. Learning in biological systems involves adjustments to the synaptic connections that exist between the neurons. This is true of ANNs as well. Neural network simulations appear to be a recent development. However, this field was established before the advent of computers, and has survived at least one major setback and several eras.

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## COMPUTER GRAPHICS

Computer graphics are pictures and films created using computers. Usually, the term refers to computer-generated image data created with the help of specialized graphical hardware and software. It is a vast and recently developed area of computer science. The phrase was coined in 1960, by computer graphics researchers Verne Hudson and William Fetter of Boeing. It is often abbreviated as CG, though sometimes erroneously referred to as computer-generated imagery (CGI). Some topics in computer graphics include user interface design, sprite graphics, vector graphics, 3D modeling, shaders, GPU design, implicit surface visualization with ray tracing, and computer vision, among others. The overall methodology depends heavily on the underlying sciences of geometry, optics, and physics. Computer graphics is responsible for displaying art and image data effectively and meaningfully to the consumer. It is also used for processing image data received from the physical world. Computer graphics development has had a significant impact on many types of media and has revolutionized animation, movies, advertising, video games, and graphic design in general. The term

computer graphics has been used in a broad sense to describe "almost everything on computers that is not text or sound". Typically, the term computer graphics refers to several different things: the representation and manipulation of image data by a computer, the various technologies used to create and manipulate images, the sub-field of computer science which studies methods for digitally synthesizing and manipulating visual content, see study of computer graphics. Many tools have been developed to visualize data. Computer generated imagery can be categorized into several different types: two dimensional (2D), three dimensional (3D), and animated graphics. As technology has improved, 3D computer graphics have become more common, but 2D computer graphics are still widely used.



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