Wearable computer

Technology, Computer

Ever since the development of the ENIGMA (the first digital computer), computers have inspired our imagination. In this period came the World War II code breaking machine designed by Alan Turing, and Von Neuman's ENIAC which can be called dinosaurs compared to present day PCs. In the earlier days, computers were so huge that it took an entire building, or at least a floor to occupy one. Computers of that era were very slow by today's standards. In the non-ending struggle to increase computing speed, it was found out that speed of electricity might become a limiting factor in the speed of computation, and so it was a need to lessen the distance that electricity had to travel in order to increase the computing speed.

This idea still holds true in modern computing. By the 1970s, computers grew fast enough to process an average user's applications. But, they continued to occupy considerable amount of space as they were made of solid blocks of iron. The input was done by means of punch cards, and later came the keyboard, which revolutionalized the market. In 1971 came the 4004, a computer that was finally small in size. The programmability of these systems were quite less. Still, computers had to be plugged directly in to AC outlets, and input and output done by punch cards.

These computers were not built keeping users in mind. In fact, the user had to adjust himself with the computer. This was the time when wearable computer (wearcomp) was born. In the 1970s, wearcomp challenged the other PCs with its capability to run on batteries. Wearcomps were a new vision of how computing should be done. Wearable computing showed that man and machine were no more separate concepts, but rather a symbiosis. The wearcomps could become a true extension of one's mind and body.

1. 1. Definition of “ Wearable Computer” Wearable computing facilitates a new form of human-computer interaction comprising a small body-worn computer that is always on and always ready and accessible. In this regard, the new computational framework differs from that of hand held devices, laptop computers and personal digital assistants (PDAs). The “ always ready” capability leads to a new form of synergy between human and computer, characterized by long-term adaptation through constancy of user-interface. 1. 2.

What is a Wearable Computer? A wearable computer is a computer that is engulfed into the personal space of a user, controlled by the user, and has both operational and interact ional constancy. Most notably, it is a device that is always with the user, and into which the user can always enter commands, and execute a set of such entered commands, and in which the user can do so while walking around or doing other activities. i. e. The wearcomp is a intertwined computer. Unlike wristwatches, regular eyeglasses, wearable radios, etc. the wearcomps are reconfigurable as the regular desktop PCs.

Wearable computing can be defined in terms of its three basic modes of operation and its six fundamental attributes.