

# **The role of visual systems in the process of education**

## **Abstract**

Visual system should be various forms of unstructured data. These are forms of charts and tables, texts, diagrams and other geometric shapes are that often in the form of data or unstructured forms. Due to bandwidth limitations and hence need to draw this type of capability within the limits of visual forms should be drawn to the shape of the data about information that are not strictly related to and What means the right of cases emphasize and bring them up out of it. The most basis of the principles and bases of visualization based on your activity forms. The main activity Information visualization is done on the computer environment. GUI design is the cornerstone of visualization is one of its essential core. This process is possible in a user interface based on the conditions that it provides the possibility of it. These capabilities, especially in the artistic design of the user interface is more important. Besides the possibility of technical and visual embedded in a user interface, such as: Visual markers, windows, menus, toolbars, photographer, and so play an important role in the visualization.

## **Introduction**

Visual software must work in a way that suits their circumstances. Due to the large size of data and exact match with each of these challenges requires the usage of these systems which are visual. Challenging or the use of visual algorithm matched and divided according to the topic or subject headings problem into several independent and where units are related to each other. In addition, several problems in this regard, voices are lining visit: or the data associated with each other are often targets of it able to classify them into different topics separately, not in a scene.

**Full of hints and thus settles on several topics and information:** Remove some of the data in different forms of visual or geometric formed to reduce and settle information. Great video of the same forms of visual perception, methods or data not only share information but also through different than in physical form and understand the limitations and restrictions would also be reduced.

Change in the pictures: users are watching and cannot be compared to the changed data and displaying them react.

The need for better and more visual system that are statistically significant due to the low speed control such systems cannot be better. The variation in the reaction and their perception of such systems is the greatest challenge. Visual jumble of each

of the data leads them to be, and in some cases may also cognition and the ability to understand users in danger. Cut into shapes, samples and various filters can remove the structures and important information, as well as redundancy, the expansion of the information in the form of this bug can lead to lack of eloquence, emotional content and the semantic relationship between the threads.

Big data management software in the visual system of macro data due to the size and dimensions of the data are very difficult. Most instruments are capable of measuring visual macro data that are common, functional and reaction times are not certain. Uncertainty about the tool can be challenging to or use of these tools to improve their effectiveness. In other words, due to uncertainty about the instruments should be used widely in different steps of the effectiveness of visual analysis is not compromised.

Potential solutions to the challenges of huge data below are some of the visual system are:

**1 Speediness:** One of the possible solutions hardware. Enhance memory and ability in the match and the Sun of solutions that can be used. Another way of putting data in memory together provided the use of a calculation method networking that many mechanisms be used in that way.

**2. Recognition of data:** Another way things have special skills in any field and in any situation.

**3. Demonstration of the quality of data:** It is necessary that the Plain data in controlling and ensuring of information.

**4-Showing meaningful results:** Another way things categorize data for the cluster to separate Mansour important content at the top and the least important things in groups or are classified as lower branches to data and information effectively put on display.

**5. To deal with additional content:** The aim of the solutions may remove the additional content of the data or the information or create separate charts for these publications.

Many visual tools for data based on Hadoop program will be launched. Mel and methods common in Hadoop program are: Hadoop common or usual distribution system and naming files Mop Hadoop YARN, Hadoop HDES, Hadoop readers. This method of Hadoop, big data except visual systems are inadequate to effectively

analyze tens responsible. Some of the software that has visual and interactive applications that are developed in order to display the data.

Many Eyes is not collective awards a website where users can upload your visual and interactive data or information. Create. TABLEM A form of software: BUSINESS Or Business Intelligence (FBI) that the visual and interactive data analysis support. Visual and interactive classification cluster analysis, a method is intuitive that using it can be realized cluster patterns. Stage that requires the challenge is to do more multi-dimensional data and enable Show users to understand the data and the structure of the cluster. Coordinated and collaborative visual methods that are rising for the detection and classification good understanding of effective and interactive creation and development of huge data. Or co-starred coordinated models is a technique that has the greatest ability to measure compared to other methods such as multi-dimensional visual coordinator and matrix matched irregular drawings to show the macro data is appropriate. Drawings matrix matched coordinators and irregular, often for less than 10 minutes after application, but the visual system while also starred Recent Songs can also run dimensions of 10 items. Coordinator starred visual systems using intensity measurements are showing them a lot of points. Coordinator starred visual system based on the type of cluster is recorded to calculate the distance between these points does not feature representation model to continue the communication that exists between them at a distance, is used. This applies to very large data processing applications. Macro data sources with direct visual system is often not possible or effective. Analysis for helping to reduce the size or complexity of the macro data Fan plays the most important role.

If the visual system and the analysis result can be mixed together better than they had witnessed. IBM visual system's ability to analyze business strategies is wrought. Indeed, what makes this possible is IBM is adaptive and visual motor. ARY and the gym and visit military capabilities, can be effective to use visual systems that can understand the macro data is very helpful. As well as to analyze and understand the vision and business savvy or business that is hidden amidst the macro data, can also be helpful. Analysis of SPSS automatically, enables macro data, selects the appropriate analysis and the results and findings through interactive visual displays.

Using alternative and surreal visuals (DVR) in order to demonstrate the scientific data processing software and hardware innovations such as the price is cheap. This innovative and powerful tool to demonstrate the multi-dimensional data potentially easy way for participation and interaction data provides visual systems. Discovering one of the foundations of the visual system must be replaced and macro data is multi-dimensional and abstract. Natural pattern recognition skills or the understanding of

human visual perception through the use of technology should be replaced with a system of increasing hits.

### **The main factors of visual information processes**

One of the main structures of Visual Information Processing is Computer Graphics. This is a way to deliver content in the form of the picture, in contrast, provide data using numeric characters and letters. Computer graphics of the main factors in the structure visualization, and process visualization based on multiple techniques of computer graphics could lead to optimal development. Many websites programming and create web pages utilize visualization techniques, based on computer graphics based. The graphics and visual components connecting element of a better understanding of effective information, and causes the user's learning process is of good quality. On the other hand Kowalski In terms of perceptual and cognitive aspects of information visualization presents parallel with technological features. Cognitive Aspects now have found many applications in computer science and computer modeling specialists have also used this knowledge about it. The next important element of the human field of vision, which is one of the main factors in the visualization. This field of study based on imaging methods for information, based on the human visual capabilities, its effective application. Artistic design is also intriguing issue in visualization, and integration of artistic elements such as color, markers, shape, volume, dimensions, composition, symmetry, and some other factors, on the basis of human cognitive abilities, with the benefit of creativity and artistic methods. The completion of this phenomenon are explored. Information visualization to attract users and have a positive effect on their learning, and the art of the issues that fulfills these demands. In addition to these elements should be noted that in the discussions of the main structures design visualization, consider the basics in relation to the transfer of information, knowledge channel, source and destination, and disturbance factors, optimal methods of information, and peripheral areas studied and by using effective measures, appropriate movement and the main source of information flows towards the Characterized by. Another fundamental structure visualization, virtual environments used in the network space. The virtual environment provides favorable conditions for activity data visualization. In addition to these special characteristics of the environment in relation to the types of data an appropriate basis for linking elements provides visual information. Also designed three-dimensional virtual environments, along with an interactive space for users to increase their cognitive ability, and a wide range of information for operation and provides guidance towards the user needs to retrieve relevant information. The use of visualization processes in the virtual space based on three-dimensional

representation, especially in the virtual reality environment of the effective application.

Using optimization methods in providing video information, concepts penetration increases day by day. Visual expression patterns based on predetermined transfer order has an effective role. Based on the effectiveness of processes visual information may be displayed with video formats. In fact, the use of visual strategies of representation and image rendering one of the most effective and efficient means for the transmission of information and understanding is regarded. This process is effective for most our lives. Today, the classical and scientific training, special attention is visual strategies. As visual learning is more effective, as well as visual thinking and attitude is also very important. One of the primary purposes of visualization, creating better conditions for thinking and analyzing information to users. Note that the images from the advantage of being able to accelerate communication. With the development of educational and penetrates computers and utilities that work on the basis of computer technology, also developed visualization application. Accordingly, Greater efforts to benefit from sign language is done, and the use of visual computer-effective strategies, especially in interaction with humans play a unique role-established. Effective methods of communicating visually using a media strategies determined that the vehicle is exhibited. If the media is visual communication processes, it is hoped that a higher amount of information to be transmitted to the audience. In addition, based on the usefulness of video formats defined processes visual information in the visual display and presentation, meaning and sense to the user in a visual processing system shipped. Using special techniques to visualize the concept of information and communication effectiveness of one of the most important areas of information retrieval is regarded here.

### **Visual, visual perception and their effects**

Among the mass of visual information which continuously irregular of each side of us storm, finally, based on objective data to create a visual relationship between information and conveys accurate possible. Interaction with the external environment through visual elements are actually benefiting from the fields of human perception is possible. Abstract understanding of the phenomenon around us, with direct understanding of the concepts about them are possible. Efforts to strengthen the cognitive abilities of humans in a greater understanding of images, their approach is effective in providing information. Visual elements based on the recognition that our understanding of the business environment we protests. Communication between us and the outside world on the basis of evidence that constitute the fundamental structure of visual perception. Accordingly, one of the

most important problems that can happen in visual communication using visual graphs are appropriate manner. The visual strategies must be more precise in the way simplicity and a better understanding of the information. Use symbols that power makes impair the user's perception, is not considered a good option at all. It does not establish effective communication not only visual elements, but also a good understanding of the concept of the image is also skewed. On this basis, it should be noted that the system design visualization methods to strengthen the power of perceptions and understanding man. Hence, great care imaging methods for information to be made consistent with human cognitive abilities. Thus must be stated that visualization concepts, and consequently one of the new areas of interdisciplinary research, among several specialists specialized fields such as computers, networking, communications, and library and information science has been. Now is wide and varied methods of visualization. Some of the methods used are specialized in specific subject areas, and some of them are applicable in various scientific fields and subjects. Characterized by the practice of harmony with the theme and concept of field of study, and based on the perceptual characteristics of human.

## **Conclusion**

There are some ways to represent and display the information as illustrated in the form of symbols, signs and images that contain information, one of the most effective communication processes the information and transmits it to the audience is. The picture can be enjoyed through the provision of information more effective. Today, some strategies are used to display visual information. Technical methods in the art makes the visualization of the information users have more penetrating power. One of the major applications of visualization in information retrieval is relying on images and retrieve information can be released. Dimension of the observation of the key points in how information visualization, information retrieval is also reflected in the way that interest users to use the information system is reduced. Process visualization plays a considerable role in analyzing data and drawing as a whole, and to communicate information between components as well as to illustrate. Visualization processes and expertise of Special Procedures, which also needs to be able to create the harmony between concept and picture. For activities in the field of visualization, it is essential that greater familiarity with the visual literacy skills. Through this skill can be achieved visual information to better understand and effectively.

