



# MAGAZINE

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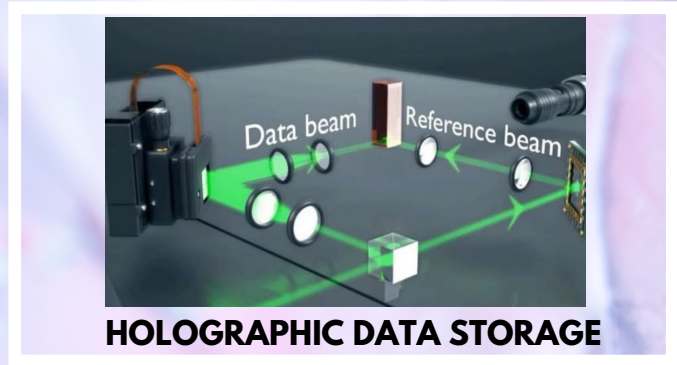
Department of

# CSE

# Byte Quest



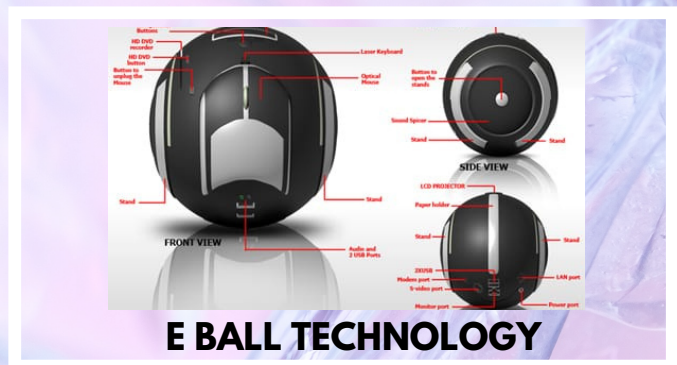
**FACE DETECTION TECHNOLOGY**



**HOLOGRAPHIC DATA STORAGE**



**3D PASSWORD TECHNOLOGY**



**E BALL TECHNOLOGY**

## Department Vision

*To be a center for academic excellence in the field of Computer Science and Engineering education to enable graduates to be ethical and competent professionals.*

## Department Mission

*To enable students to develop logic and problem solving approach that will help build their careers in the innovative field of computing and provide creative solutions for the benefit of society.*

### **FACULTY COORDINATORS**

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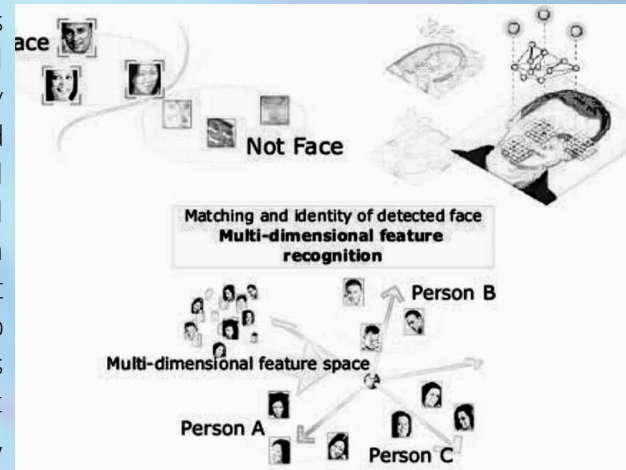
CHANDRASHEKAR (2/4) CSE B  
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AKASH (3/4) CSE C  
ANISHA (4/4) CSE B



# Byte Quest

## FACE DETECTION TECHNOLOGY

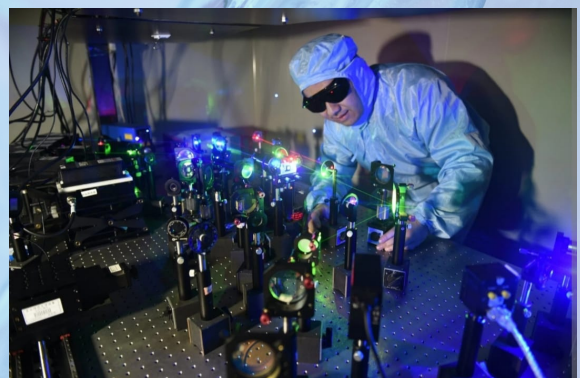
Face detection is AI-based computer technology that is used to extract and identify human faces from digital images. When integrated with biometric security systems (particularly, facial recognition ones), this kind of technology is what makes it possible to monitor and track people in real-time. In applications that use facial tracking, analysis, and recognition, face detection typically works as the first step and has a significant impact on how sequential operations within the app will perform. . Face detection helps with facial analysis by identifying the parts of a video or an image that should be focused on when determining gender, age, and emotions



Face detection is the initial step in face analysis, face tracking, and, most importantly, face recognition. The latter industry is growing by leaps and bounds, and is applied to device unlocking, banking, hospitality, law enforcement, building security, and more. Face detection is necessary for facial recognition algorithms to know which parts of an image must be used to generate faceprints

## HOLOGRAPHIC DATA STORAGE

Three dimensional or holographic storage involves using the entire media for using the storage not just a few layers like we currently use today, The process is accomplished by using two laser beams instead. Although the performance and capacity of holographic storage are less than existing tape and disk systems, they compare favorably to current optical storage devices.



When it comes to deep archiving, long-term reliability and media stability are the irresistible benefits of holographic storage, specifically when compared to tape and disks that cannot offer reliability over a long time. Holographic storage is portable, enabling the distribution of dense data that cannot be transferred easily across other networks like high-definition video or broadcast. Holographic storage is also attractive for short-term backups and archives with companies starting to depend much less on tape backups. Holographic storage bound to a virtual tape library could be a useful alternative to tapes.



# Byte Quest

## 3D PASSWORD TECHNOLOGY

The goal is to design a multi factor authentication scheme that combines the the various authentication scheme into a single 3D virtual environment which results in a larger password space. The design of 3D virtual environment, the selection of object inside the environment, and the object type reflect the resulted password space. User have freedom to select whether the 3D password will be solely recall, recognition, or token based, or combination of two schemes or more.



The proposed system is a multi factor authentication scheme. It can combine all existing authentication schemes into a single 3D virtual environment. This 3D virtual environment contains several objects or items with which the user can interact. The user is presented with this 3D virtual environment where the user navigates and interacts with various objects. The sequence of actions and interactions toward the objects inside the 3D environment constructs the user's 3D password. The 3D password can combine most existing authentication schemes such as textual passwords, graphical passwords, and various types of biometrics into a 3D virtual environment.

The choice of what authentication schemes will be part of the user's 3D password reflects the user's preferences and requirements. A user who prefers to remember and recall a password might choose textual and graphical password as part of their 3D password. On the other hand users who have more difficulty with memory or recall might prefer to choose smart cards or biometrics as part of their 3D password. Moreover user who prefer to keep any kind of biometric data private might not interact with object that require biometric information. Therefore it is the user's choice and decision to construct the desired and preferred 3D password. Innovative Component The proposed system is a multi factor authentication scheme that combines the benefits of various authentication schemes. Users have the freedom to select whether the 3D password will be solely recall, biometrics, recognition, or tokenbased, or a combination of two schemes or more. This freedom of selection is necessary because users are different and they have different requirements. Therefore, to ensure high user acceptability, the user's freedom of selection is important.



# Byte Quest

## EBALL TECHNOLOGY

A new concept of pc is coming now that is E-Ball Concept pc. The E-Ball concept pc is a sphere shaped computer which is the smallest design among all the laptops and desktops. This computer has all the feature like a traditional computer, elements like keyboard or mouse, dvd, large screen display. This concept features a laser keyboard that can be activated by pressing the particular button.



E-ball concept pc work very easy while you are making video presentations, listening music watching large screen movies, and chatting on the net.

As years passes, the computer size is becoming smaller. This ball is known as E-Ball and its design is given by Apostol Tnokovski. He was trying to create the smallest PC in the world when he came across this idea. It is shaped like a sphere because in Tnokovski's opinion this is the best shape in nature and it draws everybody's attention. you'll see the pop-out laser mouse, a pico projector inside that illuminates either the wall or a sheet of paper for a screen, and that laser keyboard.

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