Stereoscopic 3D, the technical term for what is commonly known as 3 Dimensional imagery, or simply 3D, has been around since infamy, and has come and gone in phases often labeled by the media and public as 'fads'.

As we know, being students of 3D design and animation, there is a difference between the generic usage of the term 3D, as used when referring to any graphics created by rendering software, and 3D that shows the illusion of depth – Stereoscopic 3D.

Stereoscopic 3D has been in the background in many industries and probably unknown to the entertainment and cinematic world of Hollywood. Medicine, Archeology, Forensic investigations, Chemical engineering and Oil and Gas visualizations all rely heavily on Stereoscopic 3D to make sense of all the data that needs to be visualized.

However, this time around, the glamor of Stereoscopic 3D, let's call it S3D to abbreviate and avoid confusion with regular 3d, has come to the fore front thanks undeniably to Hollywood and the slew of recent CGI and live action S3D movies.

The latest evangelist for S3D in entertainment is no doubt the hit movie Avatar. This has catapulted S3D as 'the medium' for entertainment. The experience of
sitting in a Cinema and watching a fantasy world unfold with depth, suspends dis-belief like no other medium can. In this presentation, we will look at how S3D is re-defining entertainment and the sense of immersion it creates.

We will look at 3 case studies, with an overview of why they were created and how S3D was central to the entertainment aspect as well as in some cases, how S3D was used to inform and leave an impression on people and audiences.

**S3D based Multi-sensory Experience Room**

Lavasa, is a massive city project under construction in India. Dubbed as a self sustained hill city, it is being modeled on the concepts of New Urbanism, Biodiversity and Bio-mimicry living. In short it is a city that intends to be at harmony with nature. The hill city is set amidst 7 hills and the first phase is built around an existing lake in a valley. India has 3 distinct seasons, the Monsoon or rainy season, Summer and a bit of Winter. With the first phase almost ready for occupation, the on site Sales center has a constant flow of tourists and investors looking at how life would be like in Lavasa.

The problem is that visitors in the Summer months, cannot experience what the city is like in the Monsoons, they can only be told and shown photographs and asked to “imagine” what it would be like to literally “walk amongst the clouds” as low lying clouds trapped in the valley float around peoples feet and enter the villas that will dot the hillside. Similarly people visiting the city in the monsoons would not be able to see the lush green and fresh flora that carpet the hill city during Spring and Summer.

To solve this, Real Vision came up with the idea of a multi-sensory “experience zone”. Using S3D video shot on location, and S3D CGI elements, a 3D experience
was created that makes the movie screen a “window” in a specially constructed room that resembles the interior of a sample villa. The use of surround sound, S3D video and S3D composited CGI elements along with timed effects such as fog and ambient lighting is what completes the multi-sensory Experience Zone.

The Presentation will show more details on the project, and also a short film in S3D shot on location in Lavasa. We will try to screen the example video in either polarized 3D if available or in anaglyph 3D at the seminar.

**S3D entertainment at Live Events:**

Watching a 3D movie is an example of the use of S3D in entertainment. However it does provide a passive experience to a certain extent, unless enthusiasm gets to a point where people stand on the seats in the Cinema. This has happened! With die hard fans of the U2 3D movie screened at certain Imax Cinemas in 3D.

The very nature of S3D does invite the audiences to ‘step into’ the unreal yet real world that they watch on the screen. This is what prompted Real Vision Consultancy to investigate the use of S3D at actual live events, to see the effectiveness of the medium for entertainment as well as marketing.

The presentation will give an overview of taking 3D CGI output from rendering software such as 3DSmax or Maya and how Real Vision uses it at S3D enabled venues such as outdoor events, and nightclubs to entertain the audiences. CGI rendered in S3D was successfully used for a nightclub launch of the movie Shrek 3D in Dubai.

For the Ministry of Sound tour with Bacardi, a 3D flying bat emerged from large 3D screens and hovered over audiences on the dance floor. This fun and engaging side of S3D will be presented at the seminar.
S3D in Heritage Edu-tainment

The best way to impart education or to absorb the student is to entertain them. This is true not only for primary education, but for any age group. How many people can honestly say that they are interested in learning history by watching a documentary?

TV channels like National Geography and the History Channel, while having a following are limited to those people with a passion for these subjects. To the general public we have to use creativity and entertain them while passing along the underlying message.

This is again an area where S3D excels. We will see an example of an entertaining manner in presenting history via a real time S3D movie.

3D modeling can be either animated CG character modeling or props to be used in a Hollywood type CGI movie. In this presentation we will look briefly at what can be the end result if props and architecture are modeled to scale. They can be used as usual as 3D CGI or for VFX in movies, and they can be used to make more serious multi-sensory experiences for audiences.

The presentation will show videos of how the entire ruins of a Roman amphitheater was modeled accurately and then used to create an entertaining and real time S3D movie with surround sound and a voice narration to bring the amphitheater to life!

Stereoscopic 3D video and CGI is an exciting and rapidly evolving technology. Advances in hardware and software is making it possible to mix the CGI world with the Real World as was seen in the filming of the movie Avatar. Time permitting, we will share a few thoughts on this during the seminar.
I look forward to interacting with you at the seminar and my talk on Stereoscopic 3D for Creative Entertainment.

**Presenter Bio -**

Clyde DeSouza is Stereographer and Technology Advisor at Real Vision FZ LLC, a ‘creative technology’ firm that powers the ideas of Marketing and Advertising agencies to create Experiential Marketing campaigns. He also helps not-for-profits in the Cultural and Educational sectors, with free knowledge and expertise in Stereoscopic 3D visualization, to help further their awareness creation activities. Prior to his current venture, he has worked and assisted some big name organizations in Broadcast, as well as companies involved in Stereoscopic 3D hardware and software systems. His love for technology started early, with a computer called the Amiga, which led to experiences in visual communications, including performing guest VJ spots at nightclubs. These included tours with Red Bull and Bacardi. Besides the fun side of his work, he also offers un-biased opinions and is often called in by companies as a consultant to drill down supplier quotations, checking for inflated costings of products and services, and recommending an appropriate solution.