



**SILVER OAK
UNIVERSITY**
EDUCATION TO INNOVATION



IEEE

Silver Oak University
IEEE Student Branch



A REPORT ON
Evaluating Immersive Tech
(AR and 3D simulations)

Date: 22nd April, 2021
Platform: Zoom Meeting

A webinar on
**Evaluating Immersive
Tech**

(AR and 3D simulations)

Introduction

Silver Oak University SB has always endeavoured to encourage and help aspiring engineers and to cope with technologies that are changing the world. With the same motto, Silver Oak University IEEE WIE AG in collaboration with IEEE WIE Gujarat Section had organized a talk on Evaluating Immersive Tech (AR and 3D simulations)

Augmented Reality (AR) is a technology enriching the real world with digital information and media, such as 3D models and videos, overlaying in real-time the camera view of your smartphone, tablet, PC or connected glasses and Virtual reality (VR) implies a complete immersion experience that shuts out the physical world and users can be transported into a real world and imagined environments.

About the Speaker

For conducting this session we had a very prominent speaker Mr.Hardik Mehta, he has over 12 years of industry experience in building applications and games for all Apple platforms, iPhone, and iPad, Apple Watch, Apple TV and MacOS. He has worked with McGraw Hill and Everyday Mathematics, SonyLiv, Carwale.com, GetMyParking and Arvind Ltd. His clients won the “Apple of the week” award by Apple for the 2 applications developed by him. He is working as an iOS architect at multiple start-ups remotely from his hometown and also managing a small private community named GestureFirstHQ which is a group of creative developers and makers from different countries around the globe.

About the Session

Date: 22nd April, 2021

Time: 11:00 AM to 12:10 AM IST

Platform: Zoom Meeting

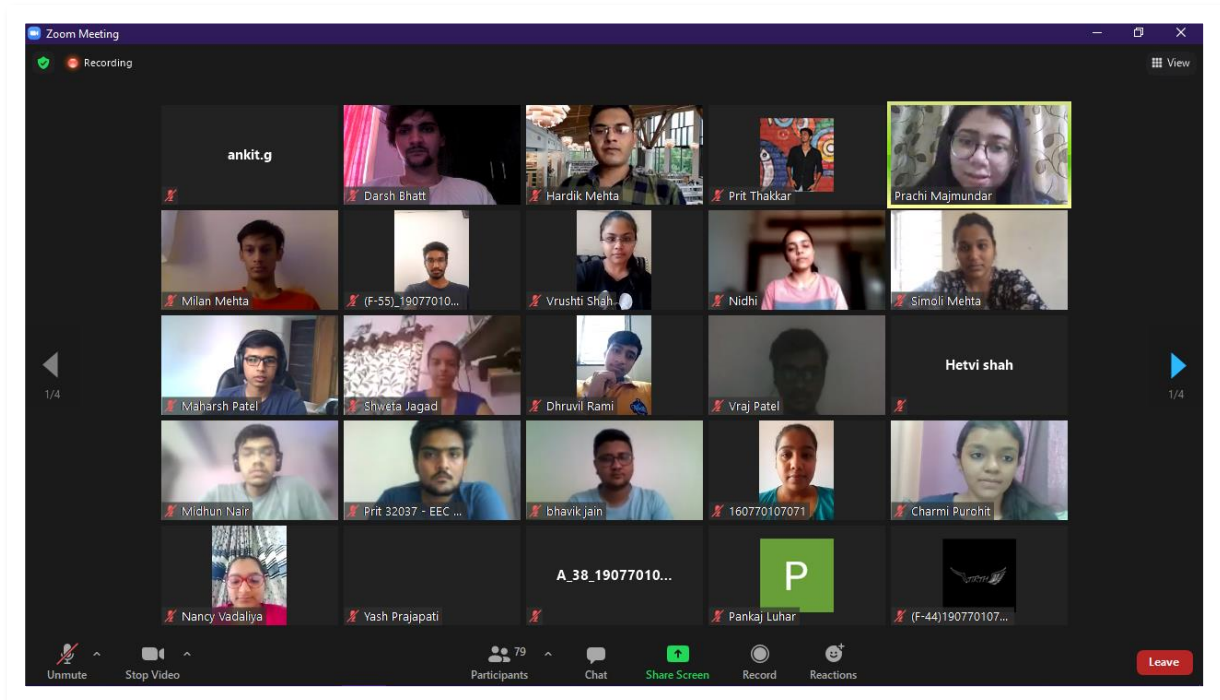
Participants: 80+

The event was initiated at 11:00 AM. The Speaker Mr.Hardik Mehta ignited the session after the warm welcome. Mr.Hardik Mehta explained what Immersive Tech is and also explained the different aspects of 3D Simulations and Augmentation Reality. He further explained the 3D simulation topics like Mapping 2D to 3D Lights and shadows, multiple lights, cameras & object’s viewpoints. The speaker also showed the participants some wonderful animations. Adding to this he then talked about Augmentation Reality in which he discussed World tracking using visual-inertial odometry, how to create 360 videos in AR. he later spoke about how Augmentation reality is better than spark and other tools and where you can use this in the field of design and visualization, educational, e-commerce, mostly in games and entertainment. Mr.Hardik Mehta ended the session by advising the participants to explore more in the field and if you tend toward this you can choose this as your career and grow.

Conclusion

The event was concluded with an expert session of questions and answers. After the session, we offered profound thanks to our prominent speaker, Mr. Hardik Mehta, for a very enlightening session and for providing such great insights into the field of AR and 3D and also expressed gratitude towards the Gujarat section for the continuous support. Also, thanked the management of Silver Oak University and Dr. Saurin Shah, Provost, Silver Oak University. Dr. Satvik Khara, Registrar of Silver Oak University and Founding Member Silver Oak University IEEE SB. Prof. Mayuresh Kulkarni, Branch Counsellor of Silver Oak University IEEE SB, and Prof. Viren Patel, Advisor of Silver Oak University IEEE WIE AG for always supporting and encouraging us. Also most importantly we thanked all the enthusiastic participants for making this event successful. Since this event has achieved excellent views and positive responses, we sincerely look forward to such informative sessions.

Some glimpse of the event



Zoom Meeting

You are viewing Hardik Mehta's screen

Prit Thakkar Hardik Mehta B_22_18077010... Kalp Shah

Vrushti Shah rakesh divedi

Recording

#3dSimulations

Isometric vs Perspective

isometric projection perspective projection

Unmute Start Video Participants Chat Share Screen Record Reactions Leave

Zoom Meeting

Recording

Vrushti Shah Simoli Mehta Maharsh Patel Prit Thakkar Hardik Mehta Divya Shah

file:///Users/marhas/Desktop/Presentation/main.html#/step-4

C B A f

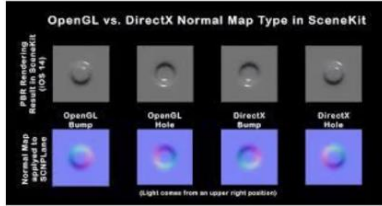
-0:00

Recording You are viewing Hardik Mehta's screen View Options

file:///Users/max/Dx/Desktop/Presentation/main.html#/step-11

#3dSimulations

Performance - Using Normal



OpenGL vs. DirectX Normal Map Type in SceneKit

OpenGL Bump OpenGL Hole DirectX Bump DirectX Hole

Normal Map Results in SceneKit (OS: 14)

Normal Map Results in OpenGL (OS: 14)

(light comes from an upper right position)

Participants 82 Chat Share Screen Record Reactions Leave

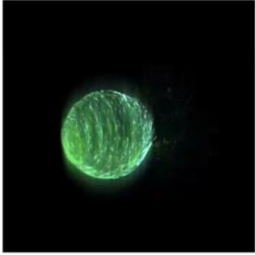
Maharsh Patel Darsh Bhatt **Hardik Mehta** Prit Thakkar B_22_18077010...

Recording You are viewing Hardik Mehta's screen View Options

file:///Users/max/Dx/Desktop/Presentation/main.html#/step-16

#3dSimulations

Particles



Participants 86 Chat Share Screen Record Reactions Leave

Maharsh Patel Darsh Bhatt **Hardik Mehta** Prit Thakkar Jatin Bhuvra