

VIRTUAL REALITY IN ARCHITECTURE

Activity Report

Part I

1. **Name of the Event:** VIRTUAL REALITY IN ARCHITECTURE
2. **Place and Date of the Event:** Online
3. **Organizing Team and Collaborators:** Himanshu Sanghani / Ramit Naahar / Mohd Anees
4. **Audience and Participants:** Students (3rd year / 4th year) + Alumni SSAA

Part II

5. **Goal/ Purpose of the Event/ Brief of the event:** POSTER



6. Materials/ Facilities used: Online only

7. Schedule of the Event:

Day 1 : 1 st August, 2020	9:00 am to 2:30pm	Online
Day 2 : 8 th August, 2020	9:00 am to 2:30pm	Online
Day 3 : 15 th August, 2020	10:00 am to 2:30pm	Online

8. Summary of the proceeding:

Day 1 : 1st August, 2020

Module 1: Introduction to VR

- Evolution and expansion of VR technology
- Introduction and adoption in Architecture, Engineering & Construction (AEC)
- Use in the design process and the profession
- Emerging applications in AEC
- Evolution of the Immersive Platform: early proof points from Trezi

Day 2 : 8th August, 2020

Module 2 : Understanding Trezi: 5 hours

- Basics of Trezi - setting up, navigation and functions
- Tips, tricks and hacks
- Use in design, product selection and presentations
- Understanding VR Collaboration
- Time Problem and collaborative review

Day 3 : 15th August, 2020

Module 3 : Understanding Trezi: 4 hours

- Basics of 3D Rendering
- Preparing a 3D Model for VR / Real-time rendering
- Best practises and pitfalls to avoid for creating 3D content
- Alumni experiences using Trezi

9. List of Participants

There were 41 participants and only 21 successfully completed the workshop.

1	Aadya Garg
2	Aajit yadav
3	Aashna Malik
4	Aditi Padhi
5	Amay raskar
6	Anchal Tibrewal
7	Anup Krishan Viridi
8	Anuradha Gautam
9	Anushish Agarwal
10	Apurv Jain

11	Devansh Khera
12	DHRITI GUPTA
13	Diksha Garg
14	Garima Aggarwal
15	GAURAV VARMANI
16	Harsh Varshneya
17	Harshit Singhal
18	HIMANI GUPTA
19	Ilika kapur
20	Jasbir Singh
21	Kavya Nambiar
22	Ketan Jhari
23	Lakshay Garg
24	Malaika bagga
25	MILINDH SONY
26	Mohit kalra
27	Namraota Jain
28	Ojaswita kolhe
29	Piyush
30	Prabhjeet Singh
31	Pratul Garg
32	Priyanka bhatt
33	Priyanka Kapoor
34	Riddhima Duggal
35	Roopal Saxena
36	Shifaali Sukanya
37	Srujan Anand Gajjala
38	Stuti Chandra
39	Stuti Mittal
40	TANVI GARG
41	Vishesh Sahni

10. Images/ Pictures/ Posters related to the event

Attached herewith

CERTIFICATE COURSE

Virtual Reality In Architecture

Gautam Tewari (Co-creator, Trezi)

Online

1st Aug, 8th Aug & 15th Aug
for SSAA Alumni & Students

Change is the necessity of the 'New World'. The profession and the process of education in architecture have to embrace this change too.

As a first of its kind in India, Sushant School of Art and Architecture (Gurugram) teams up with India's first virtual reality product for the building industry (Trezi) to train the students and professionals in adapting to the changing times. This necessary skill development would ensure that the architectural practice reaches the next level of technology.

Trezi will run a 15-hour online programme to deep dive into a fascinating world of Immersive Technology, its relevance in today's age, and how seamlessly it fits into our contemporary architectural practice.

Seats are limited. You can register by 31st July and benefit from this innovative initiative supported by SSAA.

Registration: <https://bit.ly/3jbWxMu>

Contact Us: Asst. Prof. Ramit Naahar (9810856090)
Asst. Prof. Anees Mohd (7011459511)

Virtual Reality In Architecture

Online Certificate Course

Duration : 15 hrs

Class strength: Only 40 seats

Pre-requisites for participants:

A laptop / computer that can run a 3D CAD application (SketchUp/Rhino/Revit)
Basic understanding of creating models in any of the CAD application

Saturday 1st August, 2020

Time : 9:00 am to 2:30 pm

Module 1 (5 hrs) : Introduction to VR

Evolution and expansion of VR technology

Introduction and adoption in Architecture Engineering & Construction (AEC)

Use in the design process and the profession

Emerging applications in AEC

Evolution of the Immersive Platform: early proof points from Trezi

Saturday 8th August, 2020

Time : 9:00 am to 2:30 pm

Module 2 (5 hrs) : Understanding Trezi

Basics of Trezi - setting up, navigation and functions

Tips, tricks and hacks

Use in design, product selection and presentations

Understanding VR Collaboration

Time Problem and collaborative review

Saturday 15th August, 2020

Time : 10:00 am to 2:30 pm

Module 3 (5 hrs) : 3D modelling best practices and VR in Professional Practice

Understanding the basics of 3D rendering

Preparing a 3D model for VR / real-time rendering

Best practices and pitfalls to avoid for creating 3D content

Alumni Experiences using Trezi: Prashant Kumar, Vidit Goel

Certification on Completion:

Award of certificate from SSAA and Trezi on completion of online course.

Other benefits:

Free Trezi subscription for the duration of the course

Discounted price for Trezi subscription (post-completion of course)

Virtual Reality In Architecture

MENTORS



Gautam Tewari is the Co-Creator of Trezi, a graduate from the University of New South Wales, Tewari holds a masters degree in Construction Management, and is a LEED-accredited professional. A skilled orator, Tewari has been invited extensively to speak at trade events about the potential of Immersive Technology to change the way the building industry has functioned for years. Apart from VR, Tewari is passionate about cricket, is a long-distance runner, fitness enthusiast, and an avid reader.



Architect by profession, **Darren J Rizza** lead the creation and development of VR products at SmartVizX. Currently, driving the product vertical and leading its expansion into the USA. This Carnegie Mellon University graduate has a through understanding of Building Information Modeling and possesses the skillset to implement new technologies and design methodologies. Apart from this, he loves to cook.



A SPA Delhi graduate in 1991, **Vikrant Karandikar** is an architect with an expertise in the business & marketing sector. He has over 25 years of experience defining innovative sales strategies, opening new markets, strengthening client relationships, and developing business partnerships. Currently working as head of account management, he brings in his expert start-up mentorship & architectural experience to design VR application for the architects.



With equal passion for games & technology, **Chandan Singh** is a technical artist for real-time rendering engines. He spends most of his time in game engines working on improving visuals and performance and figuring out new ways to improve the workflow. With a portfolio of multiple visually and technically impressive games for various platforms, currently he is involved in developing VR and AR applications for the AEC industry.

SCREEN SHOTS OF THE EVENT

VIRTUAL REALITY IN ARCHITECTURE

Saturday, 1st August 2020

Saturday, 8th August 2020

Saturday, 15th August 2020

VIRTUAL REALITY IN ARCHITECTURE _ DAY 1

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Introducing Trezi
Harnessing the VR Advantage

Trezi by Smooviz - Technical Overview

Utilizing the VR Edge

- Immersion
- Interaction
- Perception

Gautam Tewari

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Agenda for the Day : Session 3



- Session 1 : Approx. 1 hr 15 mins
 - Evolution and expansion of VR technology
 - Introduction and adoption in AEC
- Break 1 : 15 mins
- Session 2 : Approx. 1 hr 30 mins
 - Use in the design process and the profession
 - Emerging applications in AEC
- Break : 15 mins
- Session 3 : Approx. 1 hr
 - Evolution of the Immersive Platform: early proof points
 - Deep dive introduction to Trezi
- Q&As : Approx. 30 mins



Gautam Tewari

\$10 Trillion
Building Industry

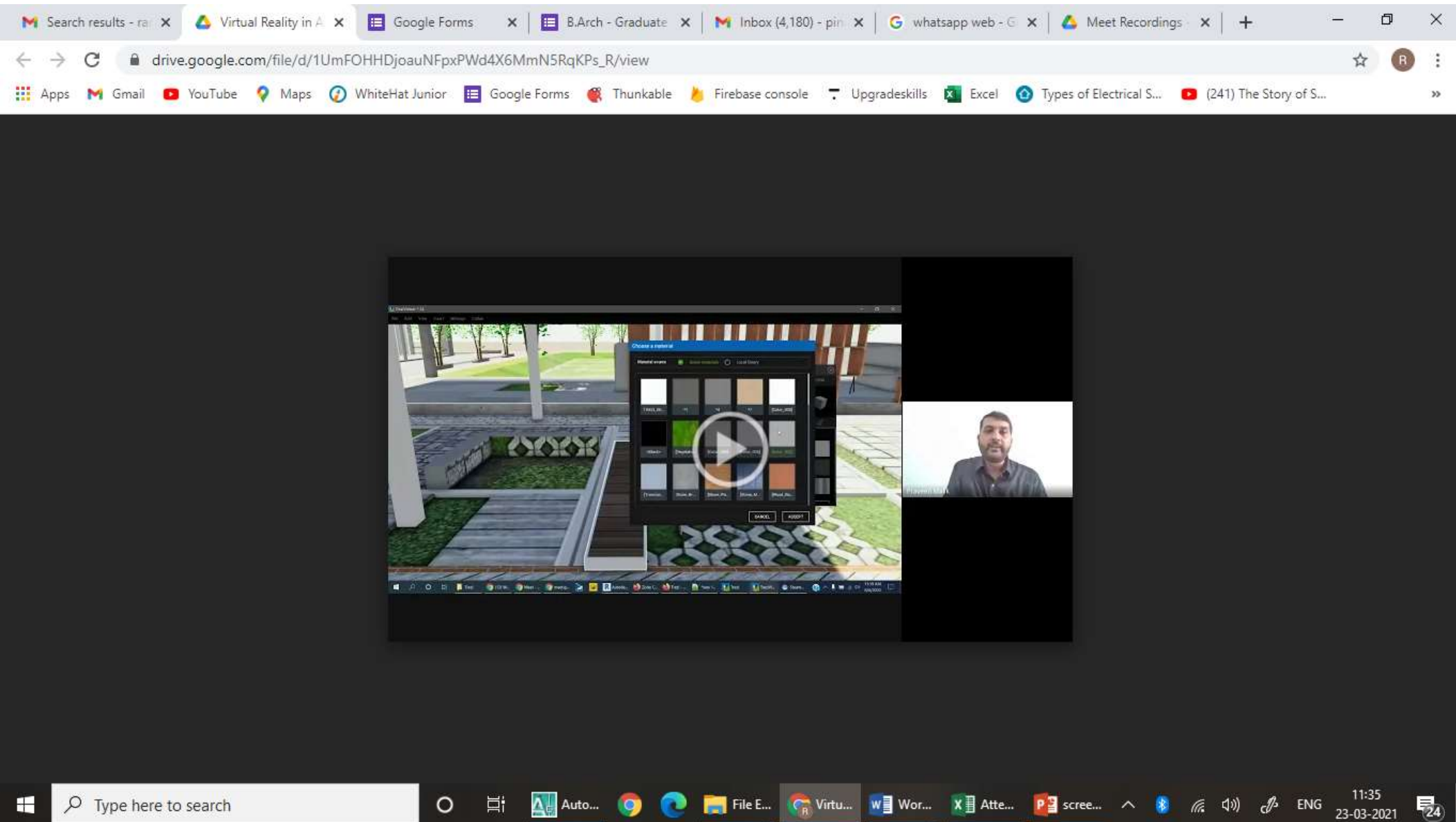
< 1/3 Projects
Completed on time/within budget

10% Project Value At-Risk
Communication & Collaboration Issues

Gautam Tewari

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VIRTUAL REALITY IN ARCHITECTURE _ DAY 2



Virtual Reality in Architecture _ Day 2 (2020-08-07 at 20:35 GMT-7)

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Gautam Tewari

Housekeeping Information



- Video/Audio
 - Please mute your video/camera to preserve bandwidth for everyone
 - Mute audio unless wishing to speak
- WFH interruptions!
 - Understandable, however do delegate and so we have your full attention throughout
 - Pl msg and stay muted if unavoidable and keep it short
 - PS : If anyone's striking a million dollar deal in the next 5 hrs - let us know and we'll all clap !
- Breaks
 - Will be strictly adhered to, for preserving time and running order
 - Overall, aiming for a 2pm close, so we keep your afternoon free.
- Volunteers:
 - Sketchup models for live working
- Q&As
 - Pl text them in the chat window
 - Some will be addressed during the course, others will be collated and responded later



Jessica Gupta

VIRTUAL REALITY IN ARCHITECTURE _ DAY 3

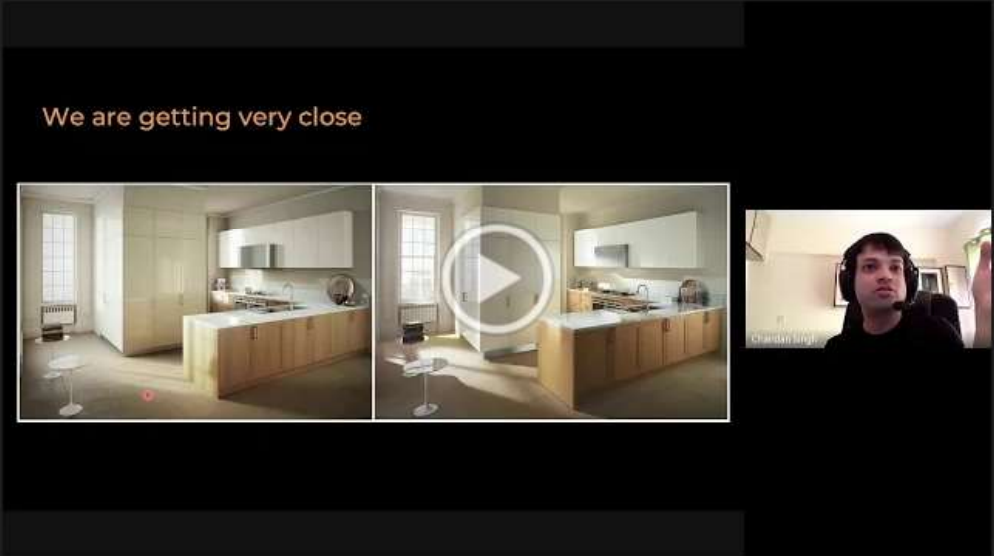
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We are getting very close



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Course Curriculum:



Module 1 (5 hrs) : Introduction to VR - Gautam, Vikrant

- Evolution and expansion of VR technology
- Introduction and adoption in AEC
- Use in the design process and the profession
- Emerging applications in AEC
- Evolution of the Immersive Platform: early proof points

Module 2 (5 hrs) : Understanding Trezi - Jessica, Preveen

- Basics of Trezi - Key Features, setting up, navigation and functions
- Tips, tricks and hacks
- Use in design, product selection and presentations
- Understanding VR Collaboration
- Time Problem and collaborative review

Module 3 (5 hrs) : 3D modelling best practices and VR in Professional Practice - Chandan, Gautam

- Understanding 3D rendering
- Preparing 3D models for VR and the pitfalls to avoid
- Alumni Experiences using Trezi (one hour each)
 - Vidit Goel
- Feedback Session



Gautam Tewari

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Virtual Reality

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Meet Recordings

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23-03-2021

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Virtual Reality in Architecture online workshop completion certificate

21 messages

Mohd Anees <mohdanees@ansaluniversity.edu.in> Sun, Nov 1, 2020 at 9:45 AM
To: aadyagarg.barch18@ansaluniversity.edu.in
Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnihar@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>, Dean SSAA <deanssaa@ansaluniversity.edu.in>

Dear Aadya Garg,

At the outset, many thanks for your very active and continuous participation in the SSAA Trezi Online Course (**Virtual Reality in Architecture**) from the 1st August - 15th August 2020.

We hereby certify that you have successfully participated in a timely manner.

Please find an enclosed E-Certificate for the SSAA Trezi Online Course.

We hope to get connected again with you soon!

Thanks and Warm Regards

Mohd. Anees
Assistant Professor
Sushant School of Art and Architecture
Ansal University
Golf Course Road, Sector 55, Gurugram, Haryana 122003

 **Aadya Trezi Certificate.pdf**
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Mohd Anees <mohdanees@ansaluniversity.edu.in> Sun, Nov 1, 2020 at 9:47 AM
To: aajit.ssaa@gmail.com
Cc: Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>, Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnihar@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>

Dear Aajit Yadav,
[Quoted text hidden]

 **Ajit Trezi Certificate.pdf**
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Mohd Anees <mohdanees@ansaluniversity.edu.in> Sun, Nov 1, 2020 at 9:49 AM
To: aashnamalik@gmail.com
Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnihar@ansaluniversity.edu.in>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>

Dear Aashna Malik,
[Quoted text hidden]

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Mohd Anees <mohdanees@ansaluniversity.edu.in> Sun, Nov 1, 2020 at 9:50 AM

To: aditipadhi@gmail.com

Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>, Ramit Nahar <ramitnahar@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>

Dear Aditi Padhi,

[Quoted text hidden]



Aditi Trezi Certificate.pdf

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Mohd Anees <mohdanees@ansaluniversity.edu.in>

Sun, Nov 1, 2020 at 9:53 AM

To: anushishpagia@gmail.com

Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnahar@ansaluniversity.edu.in>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>

Dear Anushish Agarwal,

[Quoted text hidden]



Anushish Trezi Certificate.pdf

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Mohd Anees <mohdanees@ansaluniversity.edu.in>

Sun, Nov 1, 2020 at 9:55 AM

To: apurvjain98.aj@gmail.com

Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnahar@ansaluniversity.edu.in>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>

Dear Apurv Jain,

[Quoted text hidden]



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Mohd Anees <mohdanees@ansaluniversity.edu.in>

Sun, Nov 1, 2020 at 9:57 AM

To: dhritigupta98@gmail.com

Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnahar@ansaluniversity.edu.in>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>

Dear Dhriti Gupta,

[Quoted text hidden]



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Mohd Anees <mohdanees@ansaluniversity.edu.in>

Sun, Nov 1, 2020 at 10:00 AM

To: sapl.harsh@gmail.com

Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnahar@ansaluniversity.edu.in>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>

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HARSH Trezi Certificate.pdf

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Mohd Anees <mohdanees@ansaluniversity.edu.in>

Sun, Nov 1, 2020 at 10:01 AM

To: arch.harshit18@gmail.com

Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnahar@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>

Dear Harshit Singhal,

[Quoted text hidden]

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Mohd Anees <mohdanees@ansaluniversity.edu.in>

Sun, Nov 1, 2020 at 10:03 AM

To: ilikakapur@yahoo.co.in

Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnahar@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>

Dear Ilika Kapoor,

[Quoted text hidden]

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Mohd Anees <mohdanees@ansaluniversity.edu.in>

Sun, Nov 1, 2020 at 10:05 AM

To: jssachdeva@gmail.com

Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnahar@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>

Dear Jasbir Singh,

[Quoted text hidden]

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Mohd Anees <mohdanees@ansaluniversity.edu.in>

Sun, Nov 1, 2020 at 10:06 AM

To: kavyanambiar.barch16@ansaluniversity.edu.in

Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnahar@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>

Dear Kavya Nambiar,

[Quoted text hidden]

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Mohd Anees <mohdanees@ansaluniversity.edu.in>

Sun, Nov 1, 2020 at 10:10 AM

To: lakshyagarg.barch15@ansaluniversity.edu.in

Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnahar@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>

Dear Lakshay Garg,

[Quoted text hidden]

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Mohd Anees <mohdanees@ansaluniversity.edu.in>

Sun, Nov 1, 2020 at 10:11 AM

To: milindhsony15@gmail.com

Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnahar@ansaluniversity.edu.in>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>

Dear Milindh Sony,
[Quoted text hidden]

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Mohd Anees <mohdanees@ansaluniversity.edu.in> Sun, Nov 1, 2020 at 10:13 AM
To: piyushjawa1998@gmail.com
Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnihar@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>

Dear Piyush,
[Quoted text hidden]

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Mohd Anees <mohdanees@ansaluniversity.edu.in> Sun, Nov 1, 2020 at 10:14 AM
To: gargpratul@gmail.com
Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnihar@ansaluniversity.edu.in>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>

Dear Pratul Garg,
[Quoted text hidden]

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Mohd Anees <mohdanees@ansaluniversity.edu.in> Sun, Nov 1, 2020 at 10:16 AM
To: pbhatt023@gmail.com
Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>, Ramit Nahar <ramitnihar@ansaluniversity.edu.in>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>

Dear Priyanka Bhatt,
[Quoted text hidden]

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Mohd Anees <mohdanees@ansaluniversity.edu.in> Sun, Nov 1, 2020 at 10:18 AM
To: roopalsaxena.barch15@ansaluniversity.edu.in
Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnihar@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>

Dear Roopal Saxena,
[Quoted text hidden]

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Mohd Anees <mohdanees@ansaluniversity.edu.in> Sun, Nov 1, 2020 at 10:20 AM
To: srujan.anandg16@gmail.com
Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Ramit Nahar <ramitnihar@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>

Dear Srujan Anand,
[Quoted text hidden]

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Mohd Anees <mohdanees@ansaluniversity.edu.in>

Sun, Nov 1, 2020 at 10:21 AM

To: scstuti99@gmail.com

Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>, Ramit Nahar <ramitnahar@ansaluniversity.edu.in>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>

Dear Stuti Chandra,

[Quoted text hidden]

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Mohd Anees <mohdanees@ansaluniversity.edu.in>

Sun, Nov 1, 2020 at 10:22 AM

To: tanigarg97@gmail.com

Cc: Himanshu Sanghani <sanghani@ansaluniversity.edu.in>, Gautam Tewari <gautam@trezi.com>, Dean SSAA Office <deanssaaoffice@ansaluniversity.edu.in>, Ramit Nahar <ramitnahar@ansaluniversity.edu.in>

Dear Tanvi Garg,

[Quoted text hidden]

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CERTIFICATE OF COMPLETION

is awarded to

Aadya Garg

for successful completion of
online workshop on **Virtual Reality In Architecture**
organized by Trezi with Sushant School of Art & Architecture
Sushant University, August 01-15 2020.

SUSHANT SCHOOL OF ART AND ARCHITECTURE

Sushant
University
Erstwhile ansal University Gurugram



Gautam Tewari
Trezi Co-Founder
& Chief Product Officer

Dr. Vibhuti Sachdev
Dean SSAA
Director SSAA, SSPD, SSD

Sector 55, Golf Course Road, Gurgaon,
Haryana 122003
www.ansaluniversity.edu.in

Dr. Sanjeev Kumar
Registrar
Sushant University