



A Report on One Day Workshop Program on "Virtual Reality: Digital Twin Technology"

&

"MoU Signing Ceremony" with VDT EDU TANTR Ventures Pvt. Ltd

Organised by

Department of Computer Science & Technology

In Collaboration with IIC & AI, MITS

on 21.01.2025

MITS | **MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE**
MADANAPALLE (UGC-AUTONOMOUS INSTITUTION)
Angallu Madanapalle-517325, Andhra Pradesh, India

INDUSTRY INSTITUTE INTERACTION CELL
in association with **VDT EDU TANTR VENTURES PVT LTD**

in collaboration with Department of CST and AI, MITS

PROGRAM ON VIRTUAL REALITY : DIGITAL TWIN TECHNOLOGY

21 JAN | **1 DAY** | **Seminar Hall A, MITS**

Venu Srinivas (Director)	Instructor: Vinoth E Unreal Authorized Instructor	• AR/VR workshop with hands-on training.
Deepak Kumar B (Director)		• Networking Opportunities for R&D and project collaborations.

Chief patron Dr. N. Vijaya Bhaskar Choudary Secretary & Correspondent	Patron Mrs. Keerthi Nadella Executive Director	Program Chair Dr. C. Yuvaraj Principal	Convener Dr. Swapneel Jaiswal Chief Coordinator, IIC	Coordinator Mr. V.Naveen Assistant Professor & IIC Coordinator
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Report Submitted by: Mr. V. Naveen, Assistant Professor, IIC Coordinator, Department of CST

Resource Person Details: Mr. Venu Srinivas, Director, VDT EDU TANTR VENTURES PVT LTD, UMIYA Emporium, Hosur Main Road, Tavarekere, Kaveri Layout, Adugodi, Bengaluru, Karnataka-560029; Mr.B.Deepak Kumar, Director, VDT EDU TANTR VENTURES PVT LTD, UMIYA Emporium, Hosur Main Road, Tavarekere, Kaveri Layout, Adugodi, Bengaluru, Karnataka- 560029; Mr. E. Vinoth, Unreal Authorized Instructor, VDT EDU TANTR VENTURES PVT LTD, UMIYA Emporium, Hosur Main Road, Tavarekere, Kaveri Layout, Adugodi, Bengaluru, Karnataka - 560029.

Participants: Around 100 participants from CST

Venue and Time: Seminar Hall-A and 11:00AM to 5:00 PM

Mode of Conduct: Offline

Department of Computer Science & Technology has organized **"Workshop Program on Virtual Reality:Digital Twin Technology & MOU Signing Ceremony"** in association with IIC, MITS & VDT EDU TANTR VENTURES PVT LTD, Bengaluru, Karnataka on 21.01.2025 from 11:00AM to 5:00 PM in Seminar Hall-A.

Welcome Address:

The workshop commenced at 11:00 AM with an inspiring welcome address by Dr. Swapneel Jaiswal, Chief Coordinator of IIC at the Madanapalle Institute of Technology & Science (MITS), Madanapalle. Dr. Jaiswal emphasized the key objective of the workshop and introduced the signing of an MoU with VDT EDU TANTR VENTURES Pvt. Ltd. by the CST Department. This collaboration aims to revolutionize education for both faculty and students through the integration of innovative VR tools. He further elaborated on the numerous benefits the MoU would bring to the department, including enriched course delivery, certification programs, workshops, symposiums, FDPs, offline internships, and industrial visits, all tailored to support the professional growth of students and faculty members in the CST Department.



Mr.E.Vinoth, Unreal Authorized Instructor, VDT EDU TANTR VENTURES PVT LTD, started his hands-on session briefing with innovative VR tools and he explained about roadmap of this workshop as follows,

He stated to the students that immerse yourself in the world of virtual reality with our workshop using Oculus 3 G Blender 3D. By the end, you'll have the knowledge and skills to create immersive virtual experiences that can launch you into exciting career opportunities in Software G game development, architecture, training, entertainment, and even Engineering and Medical industries. This workshop is not only a gateway to a new career path, but it's also a chance to enhance your creativity, develop your skills in emerging technologies, and showcase your technical proficiency. Don't miss out on this unique opportunity to unlock your full potential in the world of VR!



He covered the following modules to the students during the hands-on session,

- Prototyping Digital Twins
- Explanation of digital twins and their significance
- Step-by-step guide to creating a digital twin prototype
- Practical demonstration using industry-standard tools

MODULES

Blender user interface.

- Layout & collection
- Tool bar
- Timeline
- Addons

Getting started with 3D Modelling and texturing

Blender Environment Design.

- Import/Export Assets
- Level design
- Lighting and animations.

VR 360 Rendering.

- Installing Addon
- Setting up VR camera
- Render options
- Output processing



Outcomes:

At the End of the program students are able to know following aspects in,

- **Understanding 3D modeling basics:** The course could cover the fundamental concepts of 3D modeling, including polygon modeling, and texturing.
- **Blender 3D modeling techniques:** The course could teach how to use Blender's tools to create 3D models for VR applications, including creating and manipulating 3D objects, applying materials and textures, and lighting and rendering.
- **360 VR Image and video sequence Rendering**
- **Industrial Insights - VR Content G App Development**

MoU Signing Ceremony:

The MOU Signing Ceremony commenced by 5.00 PM in CST department with the delegates of

1. Mr.Venu Srinivas, Director, VDT EDU TANTR VENTURES PVT LTD, UMIYA Emporium, Hosur Main Road, Tavarekere, Kaveri Layout, Adugodi, Bengaluru, Karnataka-560029.
2. Mr.B.Deepak Kumar, Director, VDT EDU TANTR VENTURES PVT LTD, UMIYA Emporium, Hosur Main Road, Tavarekere, Kaveri Layout, Adugodi, Bengaluru, Karnataka-560029.
3. Mr.E.Vinoth, Unreal Authorized Instructor, VDT EDU TANTR VENTURES PVT LTD, UMIYA Emporium, Hosur Main Road, Tavarekere, Kaveri Layout, Adugodi, Bengaluru, Karnataka-560029



Dr. K. Dinesh, Associate Professor and Head of the Department / CST, extended a warm welcome to all faculty members and students of CST during the MOU signing ceremony with VDT EDU TANTR VENTURES Pvt. Ltd., Bengaluru. He also add up with the benefits through this MOU such as course delivery, certification programs, workshops, symposiums, Hackathons, FDPs, offline internships, and industrial visits, Tech Fest will be availed from VDT EDU TANTR VENTURES Pvt. Ltd., for the period of next 5 years.



Vote of thanks:

The workshop and MOU signing ceremony concluded with a vote of thanks delivered by Mr. V. Naveen, Assistant Professor, Department of CST and IIC Coordinator. In his address, he expressed heartfelt gratitude to the delegates of VDT EDU TANTR VENTURES Pvt. Ltd., Bengaluru, as well as the faculty members and students of the Department of CST, for their efforts in organizing the workshop and signing the MOU. He emphasized that these initiatives are significant steps toward paving a bright career path for the students.