



Faculty Development Program



VIT[®]
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

Event Outcome

Title : Application of AR and VR in Teaching and Learning Pedagogy

Date : 2024-12-02 - 2024-12-06

Time : 10:00 - 17:30

Venue : SJT 507

- Participants will understand the importance of AR and VR in content design, learning how to create visually appealing content that enhance the learning experience and effectively communicate educational concepts.
- Participants will learn the integration of Augmented Reality (AR) and Virtual Reality (VR) to create immersive learning experiences, making complex concepts more interactive and engaging.
- Participants will gain the ability to craft teaching and learning pedagogy using AR and VR that attract students, improve engagement and making them understand concepts more memorable.
- Participants will also discover and master the basics of AR, VR using free, open-source tools, allowing them to produce engaging content efficiently and experience the same with VR device.
- Participants will explore the current research trends and future scope of XR in education as well as in other fields such as Medicine, Defence and related engineering fields.

	<p>Resource Person 1 - Details Name : Niha K Designation : Assistant Professor Sr. Grade 2, School of Computer Science and Engineering University/ Company : VIT, Vellore Address : India, 632014.</p>
	<p>Resource Person 2 - Details Name : Mr Ajay Kumar Designation : Program Director and MSDE approved ARVR India Skills Expert, Industry University/ Company : Hero Vired, Bengaluru Address : India, 560034.</p>
	<p>Resource Person 3 - Details Name : Dr Himangshu Sarma Designation : Assistant Professor, School University/ Company : Indian Institute of Information Technology, SriCity Address : India, 517646.</p>
	<p>Resource Person 4 - Details Name : Mr Nagarjuna Vatti Designation : XR Experience Developer, Industry University/ Company : Paktolus , Maharashtra headquarters Florida Address : India, 400074.</p>
	<p>Resource Person 5 - Details Name : Mr Siva Kumar Reddy Designation : Metaverse Engineer, Industry University/ Company : ARK Infosolutions Pvt Ltd, Maharashtra Address : India, 400053.</p>
	<p>Resource Person 6 - Details Name : Mrs Gayathri Shri Designation : Creative Director and SNAP AR India Ambassador , Industry University/ Company : Agreal Studios , Chennai Address : India, 600039.</p>
	<p>Resource Person 7 - Details Name : Raja M Designation : Assistant Professor Sr. Grade 1, VIT School of Media, Arts and Technology University/ Company : VIT, Vellore Address : India, 632014.</p>
	<p>Resource Person 8 - Details Name : Dr P Malliga Designation : Professor , School University/ Company : National Institute of Technical Teachers Training and Research, Chennai Address : india, 600113.</p>

Resource Person's Profile :

1. Profile of Niha K

Dr Niha is working as an Assistant Professor in the School of Computer Science and Engineering, Vellore Institute of Technology (VIT-Vellore), India. She was selected by UGC as a Research Fellow with Maulana Azad National Fellowship Award (2015-2020). She has published papers, book chapters, and books (all Scopus SCI indexed). Her area of research includes Deep learning, Pattern Detection, Augmented Reality, and Virtual Reality.

2. Profile of Mr Ajay Kumar

Ajay Kumar, a dynamic Program Director specializing in gaming and immersive technology within the Hero Group of companies, brings a wealth of experience. He has demonstrated prowess in curriculum design for undergraduate, postgraduate, and certification programs across numerous universities and institutions in India.

3. Profile of Dr Himangshu Sarma

Dr. Himangshu Sarma is an Assistant Professor at the Indian Institute of Information Technology, Sri City, specializing in Virtual Reality (VR), Augmented Reality (AR), Human-Computer Interaction, and Natural Language Processing. He completed his Ph.D. at the University of Bremen, Germany where his research focused on generating virtual movement from natural language text.

4. Profile of Mr Nagarjuna Vatti

Nagarjuna Vatti is a passionate Unity3D AR-VR and Game Developer. He has a proven track record of creating innovative and interesting AR-VR projects. He is skilled in Unity3D, Unreal, IoT, Unreal Blueprint and Level Designing. He created several first-person games and RPG games and blueprints for unity3D and Unreal 5.0 respectively. He conducted several Game development workshops, taught over 500 students, thereby receiving outstanding reviews.

5. Profile of Mr Siva Kumar Reddy

Experienced Senior Graphic Designer with a demonstrated history of working in the computer software industry. Skilled in 3D visualization Unity3D Unreal Engine ZBrush 3DS Max Maya Cinema4D PS Illustrator. Strong arts and design professional with a BFA Graduation in Animation Gaming.

6. Profile of Mrs Gayathri Shri

She is an Augmented Reality creator with expertise in SparkAR, Lens studio, and Unity3D Worked on branded AR projects including Dodgers Nation, Jamaica Tallawahs (CCL-based cricket team), Pubjab Kings (IPL team), Fanta, and much more. She Had been a Technical Content Reviewer for 2 courses on Augmented Reality published with the UK-based publisher which has been used to teach Augmented Reality in some technical institutions.

7. Profile of Raja M

Prof. Raja M, Assistant Professor and Head of the Department, Department of Multimedia, VIT School of Media, Arts, and Technology (V SMART), VIT, Vellore. He has published papers, book chapters, and books on the ARVR domain (all Scopus SCI indexed). His area of research includes Augmented Reality, Virtual Reality, and E-Learning Management. He is an active IEEE Member.

8. Profile of Dr P Malliga

Dr. Malliga is a professor in the Department of Computer Science and Engineering at NITTTR and the chairman of the Internal Complaints Committee. She has 30 years of teaching, training, and research experience. She is a co-coordinator for SWAYAM MOOC for Teacher Training Courses, NITTTR Chennai sponsored by MOE, Govt. of India.

During the last few years, teaching and learning techniques have changed, both in basic education and in higher education. This change has been accompanied by new technologies such as Augmented Reality (AR) and Virtual Reality (AR). The combination of these technologies in education has allowed a greater immersion, positively affecting the learning and teaching processes. In this FDP, participants will understand the importance of AR and VR in teaching and learning, create teaching and learning materials using AR and VR tools and experience the same using VR device, explore the current and future scope of AR and VR. This FDP significantly improves the quality of teaching and learning. It addresses the current research trends and future scope of AR and VR in education as well as in other fields such as Medicine, Defence and related engineering fields.

Unity - The latest versions are more stable.

AR SDK

VR meta SDK

VUFORIA and ZAPPAR Lens studio

Snap AR

- Support will be provided to fulfill the prerequisite of FDP.

Coordinator's: Prof. NIHA K 18804 - Assistant Professor Sr. Grade 2 - SCOPE
Prof. SATHYA K 19602 - Assistant Professor Sr. Grade 1 - SCOPE