

RESOURCE PERSONS

Resource Persons from reputed Industries and Academic Institutions will deliver lectures on AR/VR Technology & its Applications in various domains. Hands-on Sessions on 3D modeling software, AR/VR Development kit etc will be conducted.

REGISTRATION

- Interested participants are required to register through AICTE ATAL portal.
<https://atalacademy.aicte-india.org/login>
- Last date of registration on or before 13.12.2020
- Confirmation of participation will be informed on 14.12.2020 through registered mail.

INFORMATION TO THE PARTICIPANTS

- Faculty members, Ph.D. Scholars, PG Students of AICTE affiliated educational institutions are eligible to participate.
- The FDP will be conducted through Online mode only.
- The platform and details for attending the session will be informed in due course.
- Maximum of 200 participants are allowed for registration based on First come First serve basis.
- There is no registration fee for the course.
- Registration, Feedback, Certificate issue will be managed through AICTE ATAL Portal.
- On successful completion of the course with minimum 80% of attendance and score in the final assessment, a digital participation certificate will be awarded by the ATAL Academy.

ORGANIZING COMMITTEE

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Dr. M. Manickam,
Chairman, MCET

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Assistant Professor - CSE
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ADDRESS FOR COMMUNICATION

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AICTE Training and Learning (ATAL) Academy

Five Days FDP on

“AUGMENTED REALITY & VIRTUAL REALITY”

15th to 19th December 2020



Coordinator

Dr. A. RATHINAVELU

Principal and Senior Professor – CSE

Dr. MAHALINGAM COLLEGE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution)

(Accredited by NBA, NAAC with 'A++' Grade)

Pollachi-642003 Coimbatore (Dt), Tamilnadu

Phone: +91-4259-236030/40/50 Website: www.mcet.in

ABOUT THE COLLEGE

Dr. Mahalingam College of Engineering and Technology (MCET) was established in 1998 by Dr. M. MANICKAM with a view to commemorate the 75th birth year of his beloved father Arutchelvar Dr. N. MAHALINGAM with a mission to impart high quality competency based education in Engineering & Technology to the younger generation to acquire the required skills and abilities to face the challenging needs of the industry around the globe. MCET is a self-financing, co-educational Autonomous Engineering College and it is approved by All India Council for Technical Education (AICTE), New Delhi & affiliated to Anna University, Chennai. The Institution has been accredited by NAAC with A++ and 7 UG Programmes (CSE, EEE, EIE, ECE, CIVIL, Mechanical, Automobile) are accredited with Tier I by National Board of Accreditation (NBA). MCET currently offers 9 UG 6 PG and 5 doctoral Programmes in Engineering, Technology and Science.

ATAL ACADEMY

AICTE Training and Learning (ATAL) Academy is established with the vision "To empower faculty to achieve goals of Higher Education such as access, equity and quality". AICTE is committed for development of quality technical education in the country by initiating various schemes launched by Govt. of India, Ministry of Human Resource Development.

ABOUT THE DEPARTMENT

The Department of CSE was established in the year 1998. It is accredited by National Board of Accreditation. The department offers 4 years Bachelor of Engineering, with an annual intake of 120 students and Master of

Computer Science and Engineering course with an annual intake of 18 students. The department has well qualified and committed research oriented faculty members.

The department is recognized as research center for offering Ph.D. /M.S (by research) programmes and focuses on research activities in the areas of Human Computer Interaction, Data Management, Networks and Security, System Design and Integration. The department has well-equipped laboratories with state-of-art computing facilities in specialized areas like IoT & Hardware, Human Computer Interaction, Internet & Mobility.

All the computers are connected internally with fiber optic cable network with 200 Mbps Internet. The courses on Oracle Workforce Development Program, Cisco Networking Academy Program and Red Hat are offered in association with respective Industries.

ABOUT THE PROGRAMME

Augmented Reality (AR) and Virtual Reality (VR) has gained an increasing amount of attention over recent years. Augmented Reality (AR) uses digital technology to overlay information in video, text or image format onto everyday objects in the real world. Virtual Reality (VR) is creating a simulated environment for the users to experience the real environment and interact with the products.

AR/VR has become a significant technology, with its applications in architecture, manufacturing, retail,

commerce, military, Geographic Information System (GIS), sports etc. AR /VR are playing a major role in engineering industry. One of the foremost applications of VR is in the area of Computer Gaming and this technology has to be exercised in other areas such as industry and education. This Programme provides an opportunity to perform research in the area of AR/VR for various domains. The Programme also tends to provide a forum for academic experts, industry experts and research scholars to exchange and share their experiences and innovations about all aspects of AR/VR. This workshop paves a path to understand both VR and AR and apply the principles of both in a real-time scenario.

COURSE CONTENTS

- ⇒ Virtual Reality/ Augmented Reality Introduction and History
- ⇒ Computer Vision and Human Computer Interaction in AR/VR
- ⇒ Computer Graphics -3D Modeling, Transformations and Rendering Procedures
- ⇒ 3D Modeling Softwares and Hands-on Training
- ⇒ AR/VR Development Toolkit : Vuforia AR , ARCore , Easy AR , Spark AR, Google VR, A-Frame
- ⇒ Introduction to Unity Architecture
- ⇒ Unity Installation and configuration and working with Unity
- ⇒ VUFORIA configuration and integration with Unity
- ⇒ AR/VR Hands-on training - Designing Curriculum-based Educational/ Engineering Applications