

Marathwada Mitra Mandal's  
**COLLEGE OF ENGINEERING**  
S. No.18, Plot No.5/3, Karvenagar, PUNE - 411 052  
*Accredited with 'A' Grade by NAAC*  
Department of Information Technology

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Academic Year: 2018-19 (Sem – I)

Report of Two days State level Workshop on “**Augmented Reality and Mixed Reality**” organized by Department of Information Technology in association with Savitribai Phule Pune University (SPPU) under Quality Improvement Program (QIP)

**Event Date & Time:** 7<sup>th</sup> to 8<sup>th</sup> December 2018, 10:00 am to 5:00 pm

**No. of Participants :** 40

**Venue:** Language Laboratory (Lab No. 08), Dept. of IT, MMCOE, Pune

**Resource Persons :**

1. Dr. Nilesh J. Uke (Principal, Trinity Academy of Engineering, Pune)
2. Mr. Rohit Waghela (Senior Unity Trainer at Anibrain School of Media Design, Pune)
3. Mr. Shekhar Lolage (Senior XR Developer, Mobiliya Pvt. Ltd. Pune)
4. Dr. Dattatray Parle (Founder & Technology Expert , Simulation Centre, Pune)
5. Mr. Pritam Pingale (Design Engineer, Simulation Centre, Pune)
6. Ms. Shobha Gaikwad (Design Engineer, Simulation Centre, Pune)

**Topics Covered :**

Day	Date	Topic Name	Speaker
Day 1	7 <sup>th</sup> Dec. 201 8	Introduction to VR	Dr. Nilesh J. Uke
		Use of AR and MR by leading organizations	Mr. Rohit Waghela
		Software Platforms used in AR like ARKit and ARCore	Mr. Shekhar Lolage
Day 2	8 <sup>th</sup> Dec. 201 8	Discussion on case study application	Dr. Dattatray Parle
		DIY activity with Google cardboard	Mr. Pritam Pingale Ms. Shobha Gaikwad
		Future of AR and MR	Mr. Shekhar Lolage

**Objectives :**

1. To understand the concepts of VR, AR and MR.
2. To learn application development using ARCore and ARKit
3. To study future trends in VR, AR and MR.

**Description:**

A two day state level workshop on "**Augmented Reality and Mixed Reality**" was organized at Marathwada Mitra Mandal's College of Engineering, Karvenagar, Pune from 7<sup>th</sup> December to 8<sup>th</sup> December 2018. This workshop was organized by department of Information Technology in association with Savitribai Phule Pune University (SPPU) under Quality Improvement Program (QIP).

The purpose of the workshop was to bring together faculty members of various Engineering and Polytechnic colleges to learn about and identify opportunities in the field of Augmented Reality (AR) and Mixed Reality (MR). The workshop was inaugurated by the chief guest Dr. Nilesh J. Uke and Dr. V. N. Gohokar (Head, Dept. of Electrical Engg., MMCOE). Dr. Sandip Chaware (Head, Dept. of Computer Engg., MMCOE), Ms. Priya Sawant (Head, Dept. of EnTC, MMCOE), Dr. Naim Shakh (Head, Dept. of MBA, MMCOE), Dr. Vikas Deulgaonkar (Dean, Student Affairs, MMCOE) and Ms. H. K. Khanuja (Dean Academics, MMCOE) were present to grace the function.

The key note address was given by Dr. Nilesh J. Uke (Principal , Trinity Academy of Engineering, Pune) on the topic Virtual Reality. In the second session, Mr. Rohit Waghela who is the Senior Unity Trainer at Anibrain School of Media Design, Pune delivered a lecture on Augmented reality and Mixed reality. He discussed, how these phenomenon are used by leading organizations like Apple, Google, Microsoft etc. He demonstrated some VR (Virtual Reality) stuffs with the help of HTC Vive device. In the third session of day one, Mr. Shekhar Lolage who is Senior XR Developer at Mobiliya Pvt. Ltd., Pune spoke on software platforms like ARKit and ARCore. He also elaborated Unity engine, XCode tools etc. The day one ended with discussion on use cases from the Virtual Reality field such as virtual walk-through of real estate, teaching aids, home decor etc.

On day two, the first session was conducted by Dr. Dattatray Parle (PhD. In Mechanical Engineering from IIT Bombay) who is the Founder & Technology Expert at Simulation Centre, Pune. He explained HMD devices, their classification, working principle in a broader way. Later he talked about top HMD devices available in

market such as Google cardboard, Google Daydream, Oculus Teardown, Microsoft Hololense etc. The post lunch session on day two was full of fun where participants leaned to make prototype of Google cardboard. This activity was conducted by Pritam Pingale and Shobha Gaikwad who are Design Engineer at Simulation Centre, Pune. During the last session of workshop Mr. Shekhar Lolage gave a lecture about future trends in this field. He discussed the research opportunities and the collaborating fields of augmented reality. These sessions were motivating for the faculties to encourage and start working in the field of augmented reality and mixed reality. The valedictory function was graced by Dr. K. R. Patil (Professor, Mechanical Engineering Department) who guided and distributed certificates to all the present participants.

This workshop was successfully organized under the guidance of Principal Dr. Sunil M. Deshpande, Dr. Charudatta B. Bangal (Director, Engineering & Polytechnic, MMM, Pune). Dr. Vijaykumar Bidve (Head – Department of IT) convened the workshop. Mr. Swapnil Shinde and Mr. Jitendra Chavan, assistant professors in department of IT, coordinated the workshop. The entire management of workshop was handled by the faculty and staff members of IT department.

## Photographs of Event:

1. Token of thanks to Dr. Nilesh J. Uke (Chief Guest & Keynote Speaker) by the hands of Dr. V. N. Gohokar (Head, Department Electrical Engg., MMCOE)



2. Token of thanks to Mr. Rohit Waghela (Speaker for the Session II) by the hands of Dr. V. S. Bidve (Head, Department of IT, MMCOE)



### 3. Keynote Address by Dr. Nilesh J. Uke



### 4. Session by Mr. Rohit Waghela with HTC Vive device



5. Token of thanks to Mr. Shekhar Lolage (Speaker for the Session III) by the hands of Dr. V. S. Bidve (Head, Department of IT, MMCOE)



6. Session by Mr. Shekhar Lolage on ARKit and ARCore



7. Token of thanks to Dr. Dattatray Parle (Speaker for the Session IV) by the hands of Dr. V. S. Bidve (Head, Department of IT, MMCOE)



8. Session by Dr. Dattatray Parle on HMD



9. Session by Mr. Pritam Pingale on Google Cardboard



10. Certificate Distribution







11. Valedictory function



**Mr. J. R. Chavan**      **Mr. S. S. Shinde**  
(Coordinators)

**Dr. V. S. Bidve**  
(Head, Information Technology)