

Future Supervision on Augmented Reality

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Abstract: This paper express about the augmented reality involved in the fields and its applications they are – 3d-viewer, browser, games, AR-tools, navigation, advertising, medicine and finally major role in educational port. Some of the challenged in augmented reality are discussed in day-to-day life. Future view and growth of the augmented reality will be discussed.

Keywords: Augmented Reality, AR tools, Navigation, Browser, Games, Applications

I. Introduction

In current emerging digi – technology world AR has an essential part in all leading fields. The main aim of AR is to design a system so user can't differentiate real and the virtual world. AR is a field of computer research which describe the solution of real-world and computer generated data. It is a mixed state of real and virtual object in digi-technology. In 2020, 1billion users will download the augmented reality app's which makes the learning method into cool interactive fun mode.

This Augmented reality technology extends our physical world, by adding many layers of digital information onto it. Same as Virtual Reality (VR), AR not create the complete artificial environments to replace real with a virtual one. AR appears in straight view in the existing environment and also adds sounds, videos, graphics, images.

II. Future view on AR

More than 2.5 billion users will download the AR apps annually and it will get generated to the revenue of income bit more than \$5.0 billion by the year of 2018 and so on.



Fig 1: Current Status Rate in AR

III. AR involved in the fields

Augmented Reality has involved in vast variety of fields. They are

- 3d- viewer app
- Advertising
- Games
- Navigation
- Medicine
- Education
- Browsing
- Military
- Engineering and so on...

3.1. 3D-VIEWER

3.1.1. AUGMENT – User may have an opportunity to look their product in 3D way. So the user can handle this application in both IOS and Android.



Fig2: Logo of AUGMENT

3.1.2 Holo Builder – It is the fast & secure 360 reality capturing solution for construction projects the matter.



Fig 3: Holo Builder

3.2. AR in Browser

3.2.1. ARGON4 – It is web gateway and it has the capability to view 3D AR. It grants all 3D view reality to be augmented.



Fig 4: Logo AR

3.2.2. Google's ARCore – Google has launched this ARCore recently in the year of 2018. It helps user to create new mobile application of AR.



Fig 5: Google's ARCore

3.3 AR in Games

3.3.1 Pokémon Go - It tracks the current spot- area and interact the players to catch the variety of Pokémon's.



Fig 6: Mobile mode Pokémon Go

3.3.2. Real Strike – It is one of the finest and earliest (First-Person-Shooting) AR application. It is also the 3D shooting game, but it applicable only in IOS.



Fig 7: Gun Shooter AR Game

3.3.3. My Tamagotchi Forever – It is an AR game app for Android devices. It uses when we explore this game we can analyze the AR effect. This game provides the free platform in Android.



Fig 8: Logo of Tamagotchi game

3.3. AR in Navigation – AR applications in smart phones generally included Global Positioning System (GPS) to spot the user's Location.

3.4.1. AR GPS Drive / Walk Navigation - The application makes use of the Smartphone's GPS and camera to execute a car navigation system with an augmented reality-powered technology.



Fig 9: AR GPS Navigation View

3.4.2. AR GPS Compass Map 3D – This application allows the user to contribute the current spot area and the location to their friends.



Fig 10: 360 Compass Navigation in AR

3.5 AR in Education – Using the AR we can turn boring classes into an interesting interactive fun mode classes. It reduces the usage of paper and the manual work into an ease one. Using this AR facility we can able to change the way of learning into practical one.



Fig 11: Classroom view on AR

So the user may to learn in anytime and anywhere. Student's need not to study the whole theory instead of that mind map, snapshot representation, it helps all of them to remember in ease way, also develops the team work.



Fig 12: Playing mode on AR

In the current survey 87% of students want to emerge with leading technology and they need to change their way of learning method in simple way. When we reach 2020, 1 billion users are expected to join in current trend setting learning world.



Fig 13: Advertising on AR

It provides the visual representation of the study material, using this AR technology we can able to learn any language like, chemistry, geometry, zoology and even programming using the AR App's.

IV. Apps involved in AR

- ✓ Knight Fall – It is a kind of defense game, targeting the enemy and earns gold coins to travel next level.
- ✓ Just A Line - 3D view snaps and it provides editing process.
- ✓ Ingress - Google's first AR game in tech world.
- ✓ Zombies Go – Finding something yourself to attack with zombie. It resembles the game of Pokémon Go.
- ✓ Quiver – 2D coloring books
- ✓ Ghost Snap – It's a horror game; this game is inspired by found footage movie. In this game we can able to survive not to win.
- ✓ ARULER – Ease way to measure the object in 3D viewer

V. Pro's in AR

- ❖ Reduces the manual work
- ❖ Develops student's interactive and curiosity
- ❖ Has vast variety of fields
- ❖ Saves time
- ❖ Motivational and individualized learning.
- ❖ It promotes object visualization in the unique way

VI. Conclusion

Augmented Reality has risen to become one of the most promising digital technologies. AR will touch all sectors of our lives, our technology society and so on. So AR will keep on developing and tracking according to the trend digi-technology. Augmented Reality has the ultimate level of advancement in tech world

References

- [1]. <https://studymafia.org/augmented-reality-seminar-and-ppt-with-pdf-report>
- [2]. <https://www.emergingedtech.com/2018/08/multiple-uses-of-augmented-reality-in-education>
- [3]. <https://www.3pillarglobal.com/insights/augmented-reality-introduction-and-its-real-world-uses>
- [4]. https://www.google.com/search?biw=1366&bih=654&tbm=isch&sa=1&ei=nrkcXKXEFJ49QOemZSwCA&q=market+growth++of+virtual+reality+upto+2018&oq=market+growth++of+virtual+reality+upto+2018&gs_l=img.3...7257.16123..16426...40..0.321.3588.0j12j4j2.....1....1..gws-wiz-img.....0i8i30.K6-IHT2tU-w
- [5]. <https://mobidev.biz/blog/augmented-reality-future-trends-2018-2020>
- [6]. <https://www.sciencedaily.com/releases/2018/10/181029165525.html>
- [7]. <https://www.mitpressjournals.org/doi/pdfplus/10.1162/pres.1997.6.4.355>