

# Latthe Education Society's Polytechnic, Sangli

Department Of Computer Engineering

# NEWSLETTER

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# **Editorial Board**

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- Ms. Patil S. D. (COMPESA treasure)
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#### Inside

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#### Vision:

To lead in empowering students with knowledge and skills for becoming socially responsible and successful in their career.

#### Mission:

- Imparting fundamentals of Computer Engineering.
- Training students to practise advanced techniques through skill oriented programmes.
- Nurturing overall personality through soft skill development programmes.
- Connecting with industry for successful career.

#### **Program Education Objectives:**

- Provide socially responsible environment friendly solutions to Computer Engineering related broad based problems adapting professional ethics.
- Adapt state of the art Computer Engineering broad based technologies to work in multidisciplinary work environment.
- Solve broad based problems individually and as a team member communicating effectively in the world of work.

#### Editorial

It gives me immense pleasure, to present first Newsletter for this academic year 2023-24. In polytechnic the student has to develop a career path during the period of three vears. In these three years student should acquire knowledge and develop the skills needed for today's job market. In today's job market along with academic skills, soft skills like communication skills, managerial skills, time management are also having equal importance. Seminars, micro projects, final year projects, organisation of various events will help in improving these abilities. Students have a responsibility to make an effort and focus on tasks. While preparing students for the corporate world we emphasise on improving critical thinking, analytical skills, decision making, application of knowledge and skills in real-life situations, problem solving and analysis and working in a team. Industrial visits, expert lectures, lectures for personality development, industrial trainings are organised which will help to improve these abilities in students. Good educational practices will connect academics to real situational problems and foster the creativity, collaboration, and critical thinking.

#### Admission scenario:

From last academic year (2022-23) intake of computer engineering program is increased from 60 to 120. There is overwhelming response for admissions to Computer Engineering program.

ADMISSION 2023-24

Class	Admissions
FYCO	126
SYCO	128
TYCO	60+2(OTO)

#### **Results Summer 2023:**

Class wise toppers for Summer 2023 MSBTE exam and class wise results are as follows

#### **TOPPERS SUMMER – 2023**

#### T Y COMPUTER



Rank	Name of student	Percentage
01	Mujawar Ayan Majjid	92.46
02	Rajput Vaibhav Sopan	90.91
03	Kavathekar Megha Vijay	90.86

## S Y COMPUTER



Rank	Name of student	Percentage
	Shinde Shreyas Suresh	90.8
01	Jadhav Vedant Satish	90.8
	Upadhye Suraj Shantinath	90.8
02	Sawant Varad Annasaheb	90.13
03	Mujawar Kousar Rashid	87.87

## F Y COMPUTER DIV1



Rank	Name of student	Percentage
01	Todkar Shreya Balaso	87.38
01	Kore Vedika Nayaku	86.38
01	Sawant Sanket Sanjay	85

#### F Y COMPUTER DIV2



Rank	Name of student	Percentage
01	Akiwate Om Ashish	89.5
01	Shaikh Saleha Naushad	88
01	Mahadik Harshal Sanjay	87.5

#### **Formation of COMPESA:**

Every year students associations are formed in the Institute by each department. This year also we have formed COMPESA (Computer Engineering Students Association). These associations provide a platform to the students to explore their co-curricular as well as extra-curricular activities. Office bearers of this association for the AY 2023-24 are

**President:** Mr. Smarth S. Mhetre Vice-president1: Ms. Sanika D.Nandre Vice-president2: Mr. Atharv N. Shinde Secretary: Mr. Nihal J. Shaikh Treasurer: Ms. Shravani D. Patil

**Co-curricular and extracurricular activities:** On 15<sup>th</sup> September 'Engineers Day' was celebrated in our institute with very much enthusiasm. On this day, inauguration of all students associations was organised at the auspicious hands of guests Captain Dr. S.P. Sonaje, Principal G. P. Miraj, Mrs. Bharati S. Biraje, Executive Engineer, ZP, Sangli and Mr. Omkar Shendure, Executive Engineer, Water Resource Dept. Govt. of Maharashtra.



Personality Development Lecture Mr. Omkar Shendure

Mr. Omkar Shendure, Executive Engineer, Water Resource Dept. Govt. of Maharashtra addressed our students regarding "opportunities in Govt. sector after Engineering Diploma and Degree and how to prepare for UPSC and MPSC".



Personality Development Lecture by Mrs. Bharati S. Biraje

Mrs. Bharati S. Biraje, Executive Engineer, ZP, Sangli guided our students about "opportunities in Government sector for Engineering field"

COMPESA has also organised Technical Quiz competition at department level, on the occasion of Engineer's Day.

The objective of this competition is to nurture healthy competition among students and enhance their skills.

In this Quiz competition 8 teams (32 students) from S. Y. Computer class were participated.



**Quiz Competition** 

Winners of the Quiz competition are

Tanuja Wagh	S. Y. Comp
Sharvari Awati	S. Y. Comp
Shravani Patil	S. Y. Comp
Samiksha Chougule	S. Y. Comp



Eye checkup camp

On this day eye check-up camp was arranged. It was conducted by Nandadeep Netralay



. Blood donation camp

On the same day 'blood donation camp', 'Haemoglobin and blood group check-up camp' were also organised for our students.

On 23/10/2024 fresher's party was organised by our students. 'Mr. Fresher' and 'Ms. Fresher' were selected. This year one innovative idea was implemented. Expert lecture by Mr. Siraj Shaikh on the topic 'Recent trends in IT Industry' was organised.



Expert lecture on "Recent trends in IT Industry"

Division A Mr. Fresher: Ayush Desai Ms. Fresher: Revati Bhendave Division B Mr. Fresher: Prathamesh Neje Ms. Fresher: Sneha Chougule

T.Y. computer students visited BSNL on 13.10.2023 to study working of the organization, devices and softwares used



**BSNL** visit

## Article by student

# Augmented Reality: Bridging the Gap Between Real and Virtual Worlds Introduction:

Augmented reality (AR) is a groundbreaking technology that has transformed the way we interact with the world around us. By overlaying digital information onto our physical environment, AR has opened up a world of possibilities for entertainment, education, business, and much more. In this article, we will explore the fundamental concepts of augmented reality and its applications across various industries.

## What is Augmented Reality?

At its core, augmented reality enhances our perception of reality by adding digital elements to the physical world. Unlike virtual reality, which immerses users in entirely simulated environments, AR combines the real world with computer-generated information. This is typically achieved through devices like smartphones, smart glasses, or headsets equipped with AR technology.

## Key Components of AR:

<u>Hardware</u>: AR hardware can range from handheld devices like smartphones to more specialized equipment such as AR glasses or headsets. These devices capture the real world and display digital content to the user.

<u>Software</u>: AR software processes real-world data and overlays digital content onto the user's view. This content can include 3D models, text, images, and animations.

<u>Sensors</u>: Sensors like cameras, accelerometers, and GPS are crucial for AR systems to understand the user's environment and location accurately.

## **Applications of Augmented Reality:**

<u>Gaming</u>: Perhaps the most well-known application of AR is in mobile gaming, with games like Pokémon GO and Ingress using the technology to blend the virtual and real worlds. <u>Education</u>: AR is transforming education by making learning more interactive. Students can use AR apps to explore 3D models, historical reenactments, or immersive science simulations.

<u>Healthcare</u>: Surgeons use AR during procedures to overlay patient data, allowing for more precise and safer surgeries. AR is also used for medical training and patient education.

<u>Retail</u>: Many retailers use AR to enhance the shopping experience. Customers can visualize products in their own space before making a purchase, thanks to AR apps.

<u>Manufacturing</u>: AR assists in assembly and maintenance tasks by providing step-by-step visual instructions, reducing errors and improving efficiency.

Real <u>Estate</u>: Prospective homebuyers can use AR to tour properties virtually and get a feel for the space before visiting in person.

#### **Challenges and Future Directions:**

Despite its promise, AR faces challenges related to hardware limitations, privacy concerns, and the need for robust content development. However, as technology continues to advance, these challenges are being addressed.

The future of augmented reality is promising. With improved hardware, more sophisticated software, and greater integration into everyday life, AR is poised to become a standard tool for various industries. As it continues to evolve, augmented reality has the potential to reshape the way we work, learn, and play.

## **Advantages of Augmented Reality:**

Enhanced User Experience: AR improves user engagement by adding interactive and immersive elements to real-world experiences, making them more enjoyable and informative.

Education and Training: AR is an effective tool for training, allowing users to practice and learn in a safe and controlled environment. This is especially valuable in fields like aviation, military, and medical training.

<u>Remote Collaboration</u>: AR can facilitate remote collaboration by enabling individuals to share their AR-enhanced view of a situation or object, making it useful in fields like remote technical support.

<u>Increased Productivity</u>: In industrial settings, AR provides workers with real-time information and instructions, reducing errors and improving efficiency.

Marketing and Advertising: Brands use AR to create innovative marketing campaigns and advertisements, increasing customer engagement and interaction.

<u>Tourism and Exploration</u>: AR apps provide tourists with information about historical sites, landmarks, and cultural points of interest as they explore new places.

<u>Accessibility</u>: AR can be used to provide information and assistance for individuals with disabilities, such as visual or hearing impairments.

## **Disadvantages and Challenges:**

<u>Hardware Limitations</u>: High-quality AR experiences often require expensive hardware, limiting widespread adoption.

<u>Privacy Concerns</u>: As AR systems collect data about the real world and users, privacy issues arise, such as the potential for unauthorized data collection or misuse.

<u>Content Development</u>: Creating compelling AR content can be complex and costly, limiting the availability of high-quality applications.

<u>Safety Concerns</u>: In situations where users are visually or mentally distracted by AR content, there may be safety risks, especially when operating vehicles or heavy machinery.

<u>Dependency on Connectivity</u>: Many AR applications rely on a stable internet connection, making them less reliable in areas with poor connectivity.

<u>Social Acceptance</u>: The presence of people wearing AR glasses or using AR apps in social settings may lead to social acceptance challenges.

<u>Energy</u> <u>Consumption</u>: Running AR applications on mobile devices can drain battery life quickly, which can be a drawback, especially when users are on the move.

## **Future Directions:**

- 1. <u>Wearable AR</u>: The development of lightweight, stylish AR glasses is a promising direction, making AR more convenient and socially acceptable.
- 2. <u>5G Integration</u>: The rollout of 5G networks will enhance the performance of AR applications, providing faster data transfer and lower latency.
- 3. <u>AI Integration</u>: Integrating artificial intelligence will enable AR systems to better understand and respond to the user's environment, creating more dynamic and personalized experiences.
- 4. <u>Standardization</u>: The development of industry standards will ensure compatibility and interoperability among different AR devices and platforms.
- 5. <u>Healthcare Advancements</u>: AR in healthcare will continue to grow, with potential applications in telemedicine, medical imaging, and remote patient monitoring.
- 6. <u>Education Revolution</u>: AR will revolutionize education, offering more immersive and personalized learning experiences, especially as it becomes more accessible and affordable.

## **Conclusion:**

Augmented reality is no longer a futuristic concept; it's a tangible and transformative technology with a growing presence in our daily lives. From enhancing entertainment experiences to revolutionizing industries like healthcare and education, AR is ushering in a new era of human-computer interaction. Its potential knows no bounds, and as technology evolves, the possibilities for AR applications will only continue to expand.

Augmented reality is a dynamic and evolving technology that holds immense potential. While there are challenges to address, the advantages and applications of AR make it a transformative force in numerous industries, and its future is bright as technology continues to advance.

Written by: Sumeet Dhumal, T. Y. Computer