



## TECH NEWS

Official Newsletter of the Department Of MCA  
(P.E.S. Modern College of Engineering, Pune)

### ABOUT US...

#### FROM THE PRINCIPAL'S DESK:

The aim of the institute is to develop not just top-quality engineers but also well-developed people. Our motto, therefore, is "the joy of excellence in a world of high technology" As From the HOD's desk: It's a great pride to present our Master of Computer Application Department's e-Newsletter "Tech News", our very own newsletter which includes professional you are required to gain knowledge and use it effectively even when you are exposed to pressure. You can surely face the challenges in the world with great courage if you can manage your valuable time and set your priorities, by having healthy competition and team spirit. Working in a team, effectively yields the best results, even under tight deadlines. My congratulation to MCA Department for their consistent efforts in making the newsletter and I wish that they will continue to do this in the years to come.

**-Dr. Mrs. K. R. Joshi**

#### FROM THE HOD'S DESK:

It's a great pride to present our Master of Computer Application Department's e-Newsletter "Tech News", our very own newsletter which includes different activities articles and achievements of the MCA students. My congratulations to the team who took the responsibility for carrying out this task effectively.

**-Mrs. Pradnya A .Muley**

#### FROM THE EDITOR'S DESK:

It gives me immense pleasure to present our biannual enews letter "TechNews " for the current semester . I would like to thank our HOD and my colleagues for their support in making this issue. We have worked hard to bring up an exhilarating flashback of the event s , and achievements during the session 2023-24 Term I. I hope you find it interesting.

**-Miss.Mugdha Dharmadhikari**

#### ABOUT THE DEPARTMENT

The department of Master of Computer Application (MCA) has been started in the academic year 2003 - 04 and is permanently affiliated with Savitribai Phule Pune University and recognized by AICTE and DTE. The mission of the department is to contribute to the growth of technical education and to lead to its enrichment and advancement

## Program Educational Objectives

- Graduates will possess a broad knowledge of computer applications for successful careers in the industry.
- Graduates will exhibit professionalism, ethical attitude, communication skills, and teamwork in their profession and adapt to current trends by engaging in lifelong learning.
- Graduates will contribute as responsible citizens with a commitment to the sustainable development of society

## Department Vision

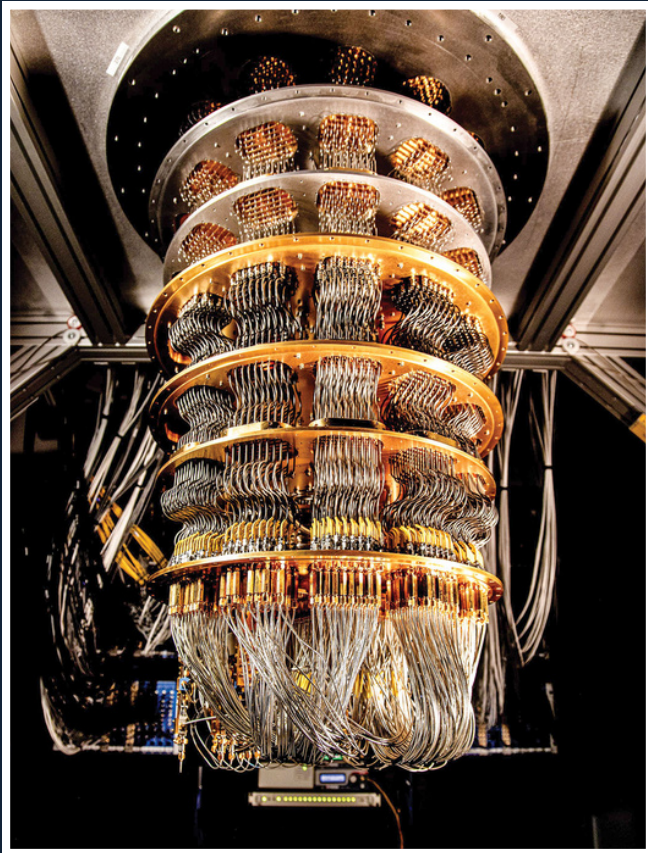
- To develop Competent Technocrats in the field of Computer applications imbued with human values.
- To impart knowledge in the field of Computer applications with a focus on developing the required competencies.
- To improve the technical skill of the students through practical and hands-on experience.
- To make students socially responsible citizens.
- To enhance the quality of the students by collaboration with Alumni and Industry.

## Program Outcomes

After completing the MCA degree student will be able to:

- **Apply knowledge of mathematics, and computer science appropriate for real-world applications.**
- **Identify, formulate, analyze, and solve complex computing problems using relevant domain disciplines.**
- **Design and evaluate solutions for complex computing problems that meet specified needs for real-world applications.**
- **Apply programming logic including the design of algorithms, programs, analysis, and interpretation of data to provide valid solutions.**
- **Apply appropriate techniques and modern computing tools for the development of real-world applications.**
- **Understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practices.**
- **Understand the need and develop the capacity to persistent learning for continual development as a computer professional.**
- **Participate as a member and leader in a team and stand out in multidisciplinary environments to demonstrate computing and management skills.**
- **Communicate effectively to comprehend and present effective technical Documentation.**
- **Apply the computing knowledge efficiently & effectively with concern for societal, environmental, and cultural aspects relevant to professional computing practices.**
- **To contribute effectively as an individual and as a member or leader in diverse teams and in multidisciplinary environments.**
- **To identify a timely opportunity and innovation with entire effort to function as a successful entrepreneur**

# TECH BULLETIN



## WHAT IS QUANTUM COMPUTING?

Quantum computing is a multidisciplinary field comprising aspects of computer science, physics, and mathematics that utilizes quantum mechanics to solve complex problems faster than on classical computers. The field of quantum computing includes hardware research and application development. Quantum computers are able to solve certain types of problems faster than classical computers by taking advantage of quantum mechanical effects, such as superposition and quantum interference. Some applications where quantum computers can provide such a speed boost include machine learning (ML), optimization, and simulation of physical systems.

## WHAT IS A QUBIT?

Quantum bits, or qubits, are represented by quantum particles. The manipulation of qubits by control devices is at the core of a quantum computer's processing power. Qubits in quantum computers are analogous to bits in classical computers. At its core, a classical machine's processor does all its work by manipulating bits. Similarly, the quantum processor does all its work by processing qubits.



# TECH BITS & BYTES



## MATCHING SEQUENCE

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## Virtual Reality: Rate of Acceleration Statistics

VR/AR was essential for helping companies during the pandemic when personal transactions and purchasing was made impossible, helping to accelerate the rate of adoption.



According to a Finances Online article, 72% of U.S. consumers credit AR with better collaboration at work, 69% report increased efficiency at work and 61% credit AR with better marketing



## How Fast is Technology Growing Statistics

- Projections show global IT spending will reach \$4.6 trillion in 2023
- The U.S. tech industry is expected to have a CAGR of 5% through 2024
- Cloud computing is expected to grow at CAGR of 17.5% by 2025



# ACADEMIC EXCELLENCE

**1st**

**ATRE BHAGYASHREE**

**9.14 SGPA**

**2nd**

**GAWALI SHREYA**

**9.09 SGPA**

**3rd**

**ANSARI JUNAID**

**8.95 SGPA**

# Technology Is The Growling Engine of Change



## Published For

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## Website

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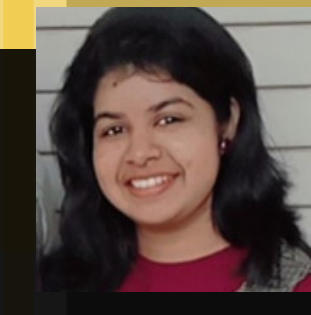
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## Editorial Board



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**Tanima Mandal**