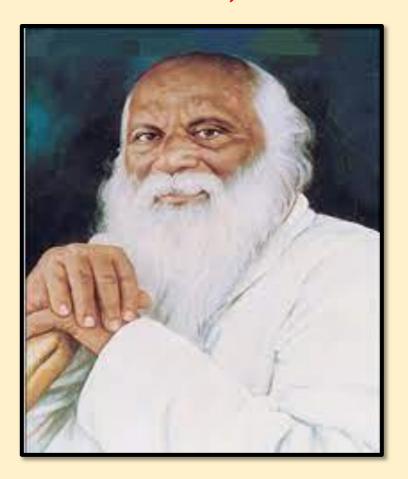
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RAYAT SHIKSHAN SANSTHA'S

KARMAVEER BHAURAO PATIL POLYTECHNIC COLLEGE, SATARA



Big & Small Bytes

Official Newsletter of

Department of Computer Engineering

For PrivateCirculationOnly

http://www.kbppoly.edu.in



Vision:

Our goal is to develop outstanding technocrats who possess both strong psychometric and cognitive abilities, and who are dedicated to achieving excellence in technical education.

MISSION:

We aim to become a leading centre of excellence in the field of computer engineering, striving for perfection in all aspects of our work.

ABOUT DEPARTMENT

Karmaveer Bhaurao Patil Polytechnic in Satara, formerly known as Karmaveer Bhaurao Patil College of Engineering and Polytechnic, began its operations in 1983 with three courses: Construction Technology, Digital Electronics, and Production Technology. Over time, as engineering progressed, Construction Technology and Production Technology were renamed as Civil Engineering and Mechanical Engineering, respectively. In 2010 and 2011, the department added two more courses: Electrical Engineering and Computer Engineering.

The Computer Engineering program focuses on understanding essential concepts, facts, and technology subjects, catering to the demands of the industry and society. The department has a team of experienced, skilled, and motivated faculty, staff, and well-equipped laboratories to meet the demands of the industry and society. The department encourages the overall development of students through a range of co-curricular and extracurricular activities. The department arranges for industry expert lectures, seminars, workshops, skill development programs, and industrial visits for students to enhance their knowledge. Additionally, students are motivated to organize and participate in various events such as project competitions, technical paper presentations, quiz competitions, social activities, and sports.

Year of Establishment: 2011

Intake Capacity: 120

DTE Code: 6406

MSBTE Code: 0041

Affiliated To: Maharashtra State Board of Education, Mumbai

Program Outcomes (PO's) of Computer Engineering Department

At the entry point of the industry soon after successful completion of the diploma program, students will be able to

- PO 1 <u>Basic and Discipline specific knowledge</u>: Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.
- PO 2 <u>Problem analysis:</u> Identify and analyse well-defined engineering problems using codified standard methods.
- PO 3 <u>Design/ development of solutions</u>: Design solutions for well-defined technical Problems and assist with the design of systems components or processes to meet specified needs.
- PO 4 <u>Engineering Tools, Experimentation and Testing:</u> Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.
- PO 5 <u>Engineering practices for society, sustainability and environment:</u> Apply appropriate technology in context of society, sustainability, environment and ethical practices.
- PO 6 <u>Project Management:</u> Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.
- PO 7 <u>Life-long learning:</u> Ability to analyse individual needs and engage in updating in the context of technological changes.

Program Specific Outcomes (PSO's) of Computer Engineering Department

At the entry point of the industry soon after successful completion of the computer Engineering Diploma program, students will be able to

PSO1: <u>Computer Software and Hardware Usage</u>: Use state-of-the-art technologies for operation and application of computer software and hardware.

PSO2: <u>Computer Engineering Maintenance</u>: Maintain computer engineering related software and hardware systems.

OUR TRIBUTE



Dr.Karmaveer Bhaurao Patil Founder, Rayat Shikshan Sanstha, Satara



Sou. Laxmibai Bhaurao Patil Rayat Mauli

OUR DESK'S



Hon'ble Chandrakant Dalvi, IAS(Retd) Chairman Rayat Shikshan Sanstha, Satara



Hon'ble Shri. Vikas Deshmukh, Hon'ble Prin. Dr. Dnyandev IAS(Retd) Secretary Rayat Shikshan Sanstha, Satara



Mhaske Joint Secretary Rayat Shikshan Sanstha, Satara



Hon Dr. K. C. Shaikh I/c Principal Karmaveer Bhaurao Patil Polytechnic Satara

Principal's Desk

Prin. Dr. Shaikh K. C.
I/c Principal
Karmaveer Bhaurao Patil Polytechnic, Satara



Karmaveer Bhaurao Patil Polytechnic in Satara has a reputation for creating an environment that fosters student success and prosperity. I am delighted to learn that the Department of Computer Engineering is releasing the Even Semester Newsletter, showcasing the achievements of the students and staff of the department. The Department of Computer Engineering has established itself as a leader in pursuing the polytechnics and its own vision and mission. The Polytechnic takes pride in this Newsletter and its contributions towards achieving the department's goals. I wish the Newsletter every success and hope that they continue to bring forth the same energy and dedication in the future editions. I also want to take this opportunity to appreciate the faculty and staff of the Department of Computer Engineering for their hard work, commitment, and dedication towards the growth and development of the department and its students. Their efforts have been instrumental in creating a positive learning environment and providing students with valuable knowledge and skills. As we move forward, I encourage all students and faculty members to continue striving towards excellence and making valuable contributions to the field of Computer Engineering. With the support of each other, we can achieve great heights and make a positive impact on society. I look forward to seeing the continued growth and success of the department in the future.

HOD's Desk

Mr. Ghorpade B. S.

Head of Department

Karmaveer Bhaurao Patil Polytechnic, Satara



Rayat Shikshan Sanstha's Karmaveer Bhaurao Patil College of Engineering and Polytechnic began offering diploma courses in Electronics Engineering, Civil Engineering, and Production Engineering in 1983. Responding to society's growing demand for computer engineering, the Computer Engineering branch was added in 2011-2012. In today's computer age, the use of computers has become widespread, and they are used to solve complex problems efficiently in every field, from medicine to banking. As a result, computer engineers have a bright future in this ever- advancing field.

Our Computer Engineering Department boasts well-equipped laboratories and a team of dedicated young, enthusiastic faculty who strive continuously for the benefit of the students. The department's goal is to promote the all-round development of students' personalities. To that end, the department organizes a series of guest lectures, workshops, seminars, personality development programs, and entrepreneurship development programs from industry experts and soft skill development institutes.

The department has signed multiple MOUs with industries and consulting firms, and regular industrial visits are arranged to familiarize students with the work culture in industry. Additionally, students are encouraged to participate in industrial training in accordance with MSBTE norms. The Association of Computer Engineering Students (ACES) organizes various curricular and co-curricular events that help develop students' organizational and management skills, as well as their leadership qualities.

Editor's Desk



Name: Mr. Dhapare A.A. Lecturer (Computer Engineering)

We are delighted to present the latest Even Semester newsletter published by the Department of Computer Engineering. We would like to express our sincere gratitude to the Principal, Head of Department, and all our colleagues for their valuable support in making this newsletter possible. The newsletter encompasses various events and achievements of our department during the previous semester. We urge you to go through it to gain a comprehensive understanding of our esteemed department.

The newsletter includes articles and reports written by our faculty and students, highlighting the activities of the department in the previous & current semester. It covers various events, such as guest lectures, workshops, seminars, industrial visits, and other activities organized by our department for the holistic development of our students.

Our department strives to provide a dynamic learning environment to our students, and we continuously update our curriculum to keep up with the latest trends and developments in the industry. Our faculty is dedicated to providing quality education, and we are proud of their expertise and experience in the field.

ABOUT ACES

The Association of Computer Engineering Students (ACES) is an organization established by students of the Computer Engineering Department to encourage the acquisition of knowledge. ACES arranges both technical and non-technical events, which facilitate the enhancement of students' skills in areas such as planning, delegation, and decision-making, as well as the development of a positive and pragmatic attitude towards themselves, their peers, and the institute. Moreover, it promotes social interaction among members of the organization. ACES has organized a range of activities, including paper presentations, industrial visits, guest lectures, soft-skills development programs, and welcome functions for all newcomers to the Computer Engineering Department.

Sr. No.	POST	CLASS	Name
1	Ladies Representative	TY-A	Avanti Awale
2	Ladies Representative	TY-B	Aarya Sabale
3	Class Representative	TY-A	Atharv Kadam
4	Class Representative	TYB	Shreyash Phalle
5	Ladies Representative	SYA	Kumudinu Bugde
6	Ladies Representative	SYB	Siddhi Oswal
7	Class Representative	SY-A	Dhanaraj Chavan
8	Class Representative	SY-B	Shivaraj Sapkal

Departmental Activities

Date: 10/1/2024

Continuing with its tradition of preserving the environment and having ecofriendly activities, the "Tree Plantation Event" was conducted on the campus of KBP Polytechnic College, Satara. on the day, the 10th January 2024. Prof. Mr. Ghorpade B.S, HOD of the Computer Engg Department has shared an outlook towards nature that must be changed from Utility to Divinity. Dr. K.C Shaikh, Principal of the college, added, "We should not only save the trees but should put our equal efforts in planting as well nurturing the trees till its growth. At the plantation of saplings, all have recited a shloka to maintain the divinity between humans and nature



Career Guidance Lecture (School connect Visit)

Very student in India decides their career post completing their 10th standard.

The step which they take after 10th will decide their future. Career choice after 10th is not just an easy task to decide upon. One needs to understand his strength, area of interest and then decide which stream to take to have a fruitful career.

In KBP Poly Satara College arranged some school connect visits for counselling the student. Counselling the student after 10th is very important because today there are many courses available in the colleges and schools. Students are confused on what course to take and what course to leave. Just imagine a 10th pass student has to choose his career with a mind full of confusion on whether to choose between science, maths, commerce, computer science and to proceed on for 11th and 12th or to choose a diploma and go to junior college. Besides traditional courses a 10h passed student today has many other opportunities such as programming, catering, app development, call centre courses and so on. Hence, choosing a career is not easy for students, a proper guidance with proper assessing of the students calibre and interest will pave success in the long run. If you have known any student who is doing their 10th standard or have completed their 10th and dreaming about what to do after, then please direct them to us.

Career Guidance Lecture (School connect Visit)

Date:15/12/2023

School connect visit:

1) Shri Mudhaidevi Vidyamandir Deur

2) K S D Shanbagh Vidyalaya Satara

3) Govt. Technical high school Satara

Faculty name-

Ms khude J.A.







Career Guidance Lecture (School connect Visit)

Date:9/01/2024

School connect visit:

1. Shriram Kholeshvar Madhyamik Vidyalaya, Munjavadi

- 2. Hanuman Madhyamik Vidyalaya, Gokhali
- 3. Bhairavnath Madhyamik Vidyalaya, Rajuri.
- 4 .Srimant Sagunamata Madhyamik Vidyalaya, Dalavadi.

FACULTY NAME:

MRS.Palkar NM









Career Guidance Lecture

School connect Visit)

Date: 3/01/2024

School connect visit:

- 1)Rayat English medium school, Satara
- 2)Khandala English Medium School, Khandala
- 3)Panchkroshi Madhyamik Vidyalaya, Javale Loham

Faculty name:

- 1)Mr Ghorpade BS
- 2)Ms Bagwan AA









Date: 9/01/2024

School connect visit:

- 1)Shri Gadge Maharaj Prathamik V Madhyamik Ashram shala, Phaltan
- 2)Argudi High school, Phaltan
- 3) Dhval Highschool, Dhaval

Faculty name:

- 1)Mr Patil AA
- 2)Ms Jadhav B
- 3)Mr Otari P







Date:26/01/2024

२६ जानेवारी: भारताची संविधान स्वीकृतीसाठी एक महत्त्वाची दिनांक. हा दिवस 'गणतंत्र दिवस' म्हणून साजरा केला जातो. भारतीय गणराज्याची स्थापना होईपर्यंत हे दिवस शांतता, सौजन्य, आणि एकत्रतेची भावना असलेले दिवस म्हणून साजरा केले जाते. या दिवशी, राज्यपालांची परेड, सार्वजिनक वाचन, कला आणि सांस्कृतिक कार्यक्रमे होतात. या वर्षी, "KBP Polytechnic College" मध्ये गणतंत्र दिवस साजरा केला गेला, ज्यामुळे विद्यार्थ्यांनी अशा महत्त्वपूर्ण दिवसां मधे सहभागी व्हायचं आणि राष्ट्रीय एकत्रतेची भावना साकारात्मकपणे मनापासून जतन केली जाते.







Industry Visit

Date: 09 Feb 2024

Place: Metrological Department Of India.





Visit at Indian Metrological Department, Mahabaleshwar

Guidance by the Experts.

Industry Visit...

Date: 16 Mar 2024

Place: Sumago Infotech Pvt. Ltd., Pune





In conclusion, a visit to the software industry offers a multifaceted experience, providing insights into innovation, technology, culture, and networking opportunities. Whether you're a student, entrepreneur, or technology enthusiast, immersing yourself in the world of software can be both educational and inspiring.

Guest / Industrial Expert Lecture

Expert Lecture on 'Personality Development'

Date: 16/01/2024

Guest of Honor: Mr. Prashant Pubal



Personality development is not a destination but a continuous journey. It requires self-reflection, a commitment to growth, and the willingness to embrace change. As individuals embark on this transformative journey, they pave the way for a more fulfilling and purposeful life, contributing positively to their personal and professional spheres.

Guest / Industrial Expert Lecture

Expert Lecture on 'Project Management Techniques'

Guest of Honor: Mr. Mahesh Waghamale



Organized guest lecture on "Project Management Techniques" for third year and second year students in computer department.

Guest lecture only for girls - Protection of woman through nirbhaya Pathak and bharosa cell, satara police

BHAROSA - was established in May 2016, as a Society for Protection of Women and Children with logistic help, funding and support from the Department of Women and Child Development, Anyone knocking on the doors of BHAROSA will have immediate access to specialized services. Assistance is provided in an integrated manner through a slew of police, medical, legal, and prosecution services, apart from psychotherapeutic counselling. This multipronged assistance culminates in relief and rehabilitation as per the requirements.

Nirbhaya Pathak - Nirbhaya Squad has been set up to curb such incidents so that girls and women in the city are not harassed, Road Romeo is harassed and any untoward incidents against women take place. The team has brought relief to the youth by informing the students about women's injustice and contact to the directly Nirbhaya pathak if anyone is harassing them without any reason, It is working to create awareness by providing information.



Date: 12/3/24

Sw. Yashavantrao Chavan Jayanti...

Yashwantrao Chavan's legacy is deeply entrenched in Maharashtra's political and social history. He is remembered as a pragmatic leader who dedicated his life to public service, emphasizing the welfare of farmers and the upliftment of the rural populace. The Yashwantrao Chavan Maharashtra Open University (YCMOU) is named in his honor, symbolizing his commitment to education and learning.

Yashwantrao Chavan's life and work continue to inspire generations of leaders, and his contributions have left an indelible mark on the socio-political landscape of Maharashtra and India as a whole.



Date: 07/03/2024

In KBP Poly. Satara college celebrating women's day For Girls.



International Women's Day is not just a single day of celebration; it is a reminder of the ongoing journey towards equality. By recognizing the achievements of women, addressing challenges, and promoting empowerment, we contribute to a world where every woman can live, work, and thrive on equal terms. Happy Women's Day!







RHYTHM 2K24..





Quiz Competition









This event even was celebrated on date 21/2/24 at KBP College Computer department under PolyQuest 2K24.

Paper Presentation







This event even was celebrated on date 21/2/24 at KBP College Computer department under PolyQuest 2K24.

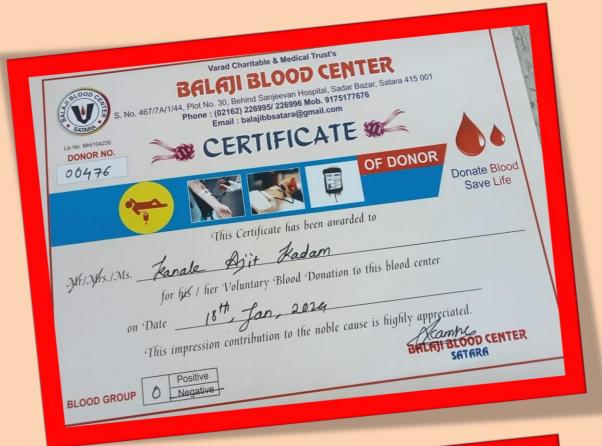
Blood Donation Camp..

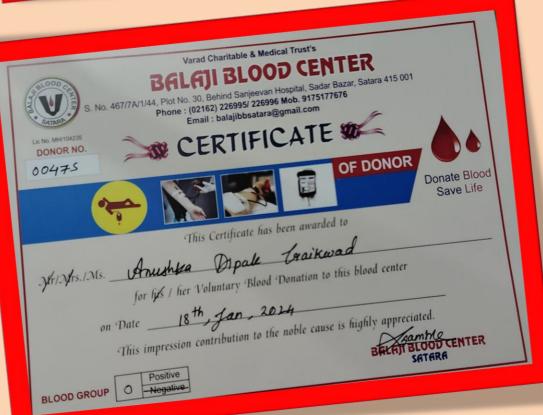
Date: 18/01/2024













Guest / Industrial Expert Lecture

1) Ideas and challenges of today's youth









Organized guest lecture on Ideas and Challenges of Today's youth for third year and second year students in computer department.

Date: 20/01/2024

Guest of Honor: Mr Juber Shaikh

2) CAREER TRNDS IN IT INDUSTRY



Organised career paths in IT industries for third year Students in Computer Department

Date:29/02/2024

Guest:Mr Maheshkumar Lakade, CEO Indradeep Infotech Pvt Ltd, Satara

Guest / Industrial Expert Lecture

3) Career in Robotics Process Automation



Organized guest lecture on career in Robotics Process Automation for second year and Third year students in computer department

Date: 4/03/2024

Guest Of Honor: Mr Sunil Deokule, Project Manager at

Fourise Software Solutions Pvt. Ltd. Pune

CSRBOX team visited our esteemed institute for IBMSKILLBUILD initiative.

Empowering Tomorrow: The Significance of Skill Building in Students

In the fast-evolving landscape of education and work, the emphasis on skill building in students has never been more critical. Beyond traditional academic knowledge, fostering a diverse set of skills equips students with the tools needed for success in a dynamic and competitive world. **Date: 5/03/2024**









Parent meeting...

Parent meetings serve as a vital bridge between educators and families, creating a collaborative environment that nurtures a child's holistic development. These gatherings offer a platform for open communication, mutual understanding, and shared commitment to a child's educational journey. Let's delve into the significance of parent meetings in the educational context. Date: 5/03/2024

















Android Development Workshop..

Guest Name: Mr Prakash Krishna Shinde

Designation: Head Of Computer Engineering Department Dr.D.Y.Patil

Polytechnic, Kolhapur.

Educational Qualification: M.Tech. in Computer Science(PhD Pursing) Experience:

17 Years. . Date: 08/03/2024











POLYQUEST 2K24















Student Achievements

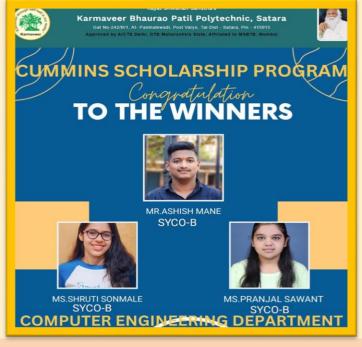




































Sports....





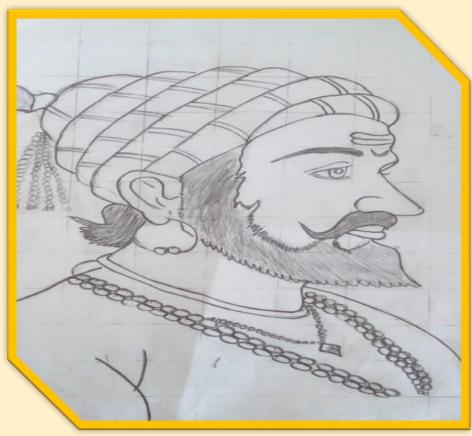














Robotics is the intersection of science, engineering and technology that produces machines, called robots, that replicate or substitute for human actions. Pop culture has always been fascinated with robots — examples include R2-D2, the Terminator and WALL-E. These over-exaggerated, humanoid concepts of robots usually seem like a caricature of the real thing. But are they more forward thinking than we realize? Robots are gaining intellectual and mechanical capabilities that don't put the possibility of a R2-D2-like machine out of reach in the future. As technology progresses, so too does the scope of what is considered robotics. In 2005, 90 percent of all robots could be found assembling cars in automotive factories. These robots consist mainly of mechanical arms tasked with welding or screwing on certain parts of a car.

While the overall world of robotics is expanding, a robot has some consistent characteristics:

- 1. Robots consist of some sort of mechanical construction. The mechanical aspect of a robot helps it complete tasks in the environment for which it's designed. For example, the Mars 2020 Rover's wheels are individually motorized and made of titanium tubing that help it firmly grip the harsh terrain of the red planet.
- 2. Robots need electrical components that control and power the machinery.

 Essentially, an electric current a battery, for example is needed to power a large majority of robots.
- 3. Robots contain at least some level of computer programming. Without a set of code telling it what to do, a robot would just be another piece of simple machinery. Inserting a program into a robot gives it the ability to know when and how to carry out a task.



Key Soft Skills for Computer Engineers

- Communication Skills: Computer engineers must work closely with other team members, including software engineers. They may also work with non-technical departments and employers when discussing project goals. An engineer must also clearly state design aspects and instructions to ensure the manufacturing process goes smoothly.
- Analytical Skills: An engineer must test their design multiple times to achieve a desired result. These professionals need to locate local issues in a larger system by testing, recording data, and analyzing the results.
- Problem-solving Skills: After analyzing flaws in the system, engineers need to find alternative ways of achieving the initial design goal or task. These employees may need to balance performance with the price or availability of resources while developing a project.
- Critical Thinking: When testing and altering a product design, engineers need to account for other factors affected by each change. Creating a successful design may require engineers to develop new techniques or look for solutions outside their standard field.

Key Hard Skills for Computer Engineers

- Microprocessors and Circuitry: Computer engineers must master the study of microprocessors and circuitry since those components make up the foundation of computers. Engineers cannot create electronics without understanding how to generate electric currents and transfer information on a physical level.
- Quality Assurance and Testing: Tech engineers rigorously test hardware designs and systems to ensure everything works correctly. A solid foundation in this skill allows engineers to prioritize major functions such as cybersecurity while finding workarounds for minor issues.
- Digital Signal Processing: Computer engineers develop systems that allow data to be sent via wireless communications. Digital signals create the basis of modern data storage and the internet, including speech and video processing.
- Operating Systems: A computer engineer needs extensive knowledge of major operating systems, like Windows, ReactOS, MacOS, and Linux, since the job often involves incorporating hardware with software.



Artificial intelligence (AI), the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. The term is frequently applied to the project of developing systems endowed with the intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalize, or learn from past experience. Since the development of the digital computer in the 1940s, it has been demonstrated that computers can be programmed to carry out very complex tasks—as, for example, discovering proofs for mathematical theorems or playing chess—with great proficiency. Still, despite continuing advances in computer processing speed and memory capacity, there are as yet no programs that can match human flexibility over wider domains or in tasks requiring much everyday knowledge.

There are numerous, real-world applications of Al systems today. Below are some of the most common examples:

- Speech recognition: It is also known as automatic speech recognition (ASR), computer speech recognition, or speech-to-text, and it is a capability which uses natural language processing (NLP) to process human speech into a written format. Many mobile devices incorporate speech recognition into their systems to conduct voice search—e.g. Siri—or provide more accessibility around texting.
- Customer service: Online virtual agents are replacing human agents along the customer journey. They answer frequently asked questions (FAQs) around topics, like shipping, or provide personalized advice, cross-selling products or suggesting sizes for users, changing the way we think about customer engagement across websites and social media platforms. Examples include messaging bots on e-commerce sites with virtual agents, messaging apps, such as Slack and Facebook Messenger, and tasks usually done by virtual assistants and voice assistants.
- Computer vision: This AI technology enables computers and systems to derive meaningful information from digital images, videos and other visual inputs, and based on those inputs, it can take action. This ability to provide recommendations distinguishes it from image recognition tasks. Powered by convolutional neural networks, computer vision has applications within photo tagging in social media, radiology imaging in healthcare, and self-driving cars within the automotive industry.

Faculty

<u>Name</u>	Designation	<u>Experience</u>
GHORPADE BIPIN SHIVAJI	HOD	12 Years
Pawar M.D.	Lecturer	10 Years
NIKAM SONALI ATUL	Lecturer	06 Years
PALKAR NEELAM MAHAMMADHANIF	Lecturer	04 Years
AWAD JYOTI VISHAL	Lecturer	03 Years
JADHAV BHAVANA SUNIL	Lecturer	02 Years
BAGWAN AASIFA AASHRAF	Lecturer	02 Years
KHUDE JANHAVI	Lecturer	02 Years
MUJAWAR SAMEENA ABDUL	Lecturer	01 Years
OTARI PRATHAMESH	Lecturer	6 Months
SHINDE SNEHA	Lecturer	4 Months
DHAPARE AKSHAY ASHOK	Lecturer	3 MONTHS
GHATGE KAJAL	Lecturer	3 MONTHS
DALVI SHAILAJA	Lecturer	3 МОТНЅ

NAVSHAD SHAIKH	Lab Assistant	10 YRS

MSBTE Exam Winter 2023 TOPPERS Class: Third Year CO

Name Of students Marks

1. Sabale Aarya: 93.22%

2. Mandhare Shraddha: 91.22%

3. Phalle Shreyash: 90.78%

4.Gaikwad Athary 90.78%



MSBTE Exam Winter 2023 TOPPERS Class: Second Year CO

Name Of students		Marks
1.	Bugde Kumudini:	93.87 %
2.	Oswal Siddhi:	93.87 %
3.	Jadhav Vaishnavi:	91.73 %
4.	Kharat Rajeshwari:	90.27 %



Rayat Shikshan Santha's

Karmveer Bhaurao Patil Polytechnic, Satara





Congratulations



Bugde Kumudini 93.87 (SYCO)





Oswal Siddhi 93.87 (SYCO)





Jadhav Vaishnavi 91.73 (SYCO)





Kharat Rajeshwari 90.27 (SYCO)



EDITORIAL BOARD

- * Dr. K. C. Shaikh (I/c Principal, K.B.P Polytechnic, Satara)
- ❖ Mr. B.S. Ghorpade (Head of Computer Engineering Dept.)
- Mr. A.A. Dhapare (Editor) (Lecturer in Computer Engineering

Thank you!