



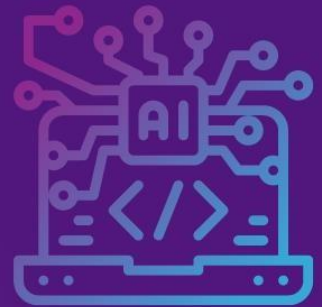
Pimpri Chinchwad Education Trust's (PCET) & Nutan Maharashtra Vidya Prasarak Mandal's (NMVPM)

# NUTAN MAHARASHTRA INSTITUTE OF ENGINEERING & TECHNOLOGY

TALEGAON, TAL-MAVAL, DIST-PUNE 411057



# 2021



## TECHZINE

Born to solve problems



Associated with  
Department Of Computer Engineering



# Vision

“Imbibing quality Technical Education and Overall Development by Endowing Students with Societal and Ethical Skills in Computer Engineers”

# Mission

1. To impart engineering knowledge and skills by adopting effective teaching learning processes.
2. To develop professional, entrepreneurial & research competencies encompassing continuous intellectual growth.
3. To produce educated students to exhibit societal and ethical responsibilities in the working environment.





## Dr. Lalit Kumar Wadhwa

Principal

I congratulate the department of Computer Engineering, **NMIET** for bringing out first issue of departmental magazine, **TECHZINE2K21**. I am sure that the magazine will provide a platform to the students and the faculty members to expand their technical knowledge and sharpen their hidden literary talent and will also strengthen the all-round development of the students. I am hopeful that this small piece of literary work shall not only develop the taste for reading among students but also develop a sense of belonging to the institution as well. My congratulations to the editorial board who took the responsibility for the energetic task most effectively. I extend best wishes for the success of this endeavor.



# Dr. Aparna Pande

HOD Computer

The University curriculum is an essence of the conventional and the radical study, beyond Horizon to develop multi facet Engineering graduate "TECHZINE2K21" Magazine plays an important role. The prime objective is to nurture Engineering students to be educating and updating with rapidly growing technologies so that Computer Engineering graduated will be employable and competent nationally and internationally. To add new feathers in the student's crown, NMIET-Computer Engineering department provides right platform in form of TECHZINE2K21Magazine.It contents Technical Blogs, Articles, and projects. Technical Competitions such as Smart India Hackathon (SIH). TECHZINE2K21Magazine consists of various sections so that every student gets equal opportunity to explore with the world. Extension with TECHZINE2K21 Magazine This different sections but not limited such as Art worth section Consists- Photography, Stretch, and Creativity. Literature section covers Poems and Quotes. Section Group Discussion on dynamic topics empowers leadership still which is the essential part in the corporate world. Technical Event and Industrial visit improves employability globally. Guru Shittah the Great Indian culture inculcates Socio-Ethical values. Placement, industry Experts views and University Topper student's thoughts and discussion motivates the budding graduates. Through this exercise the objective is to meet with the departmental and institutions vision and mission.



# EDITORIAL COMMITTEE



**Prof. Vivek Nagargoje**

*Being the Editor, I feel privileged in presenting our department magazine "TECHZINE2K21". It is designed to showcase the talents of our faculty members and students. With a sense of pride and satisfaction I would like to say that with the active support of the Management, Director, Principal, HOD, Faculty members and Students, the department magazine has come alive. I extend my thanks to the colleagues of my department for being a part of the editorial board. With all the efforts and contributions put in by the Faculty members and Students; I truly hope that the pages that follow will make some interesting reading.*



### ***AWATE MUKTA (Final Year)***

Working on this magazine provided me a chance to discover an editor, a writer and a team player within myself. I look forward for more such ventures!



### ***Ashutosh Bhagat (Final Year)***

It was completely a new experience for me to work for this magazine. Basically the exposure I got during this period portrayed many perspective of mine to the person within me.



### ***Shivam Singh (First Year)***

It has been great experience. It is always that see more and see through. 'TECHZINE2K21' is best portrayal art on science.





### ***Amruta Aher (Third Year)***

It was completely a new experience for me to work for this magazine. Basically the exposure I got during this period portrayed many perspective of mine to the person within me



### ***Ravina Chavhan (Third Year)***

"TechZine2k21" presents the achievements of students and contributions of teachers. Our endeavor is to update on the latest trends of technologies coming up and flashing some light on the innovative minds of the youth today. We hope all the readers will enjoy this issue as much as we enjoyed creating it.



### ***Smita Dhanokar (Third Year)***

"TECHZINE2K21", the departmental magazine gives us lot of information about many interesting topics. The experience of working with the team of TECHZINE2K21 was really valuable and memorable



### ***Aditya Gavhane (Final Year)***

It was immense pleasure to be a part of this magazine. It was totally a new experience which has indeed been a value addition task for me as a student. I look forward for more such opportunities.



### ***Pramod Kolte (Third Year)***

As the magazine start with nice quote "BE THE BEST VERSION OF YOU" I hope this magazine will not only give the information about our department but also help you to be best version of you.



### ***Prasad Harer (Second Year)***

*We always wanted to put together all the exceptional talent in our department together at a place. Well with "TECHZINE2K21" we tried to make it happen. The TechZine2k21 team believes to "Strive for progress, not perfection" because perfection might have an end line progress doesn't.*

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# Technology

# AN INTRODUCTION TO THE CONCEPT OF ARTIFICIAL INTELLIGENCE

By  
Shivam Singh  
(First Year)

Artificial Intelligence (AI) is a revolutionary field of computer science that aims to create machines or computer systems that can perform tasks that typically require human intelligence. The concept of AI dates back to ancient times, but significant advancements have occurred in recent decades, thanks to technological advancements, increased computing power, and the availability of vast amounts of data.

The ultimate goal of AI is to develop machines that can mimic human cognitive functions, such as learning, reasoning, problem-solving, perception, and language understanding. These intelligent machines are designed to adapt to new situations, improve their performance over time, and exhibit a level of autonomy in decision-making.



There are a number of different forms of learning as applied to artificial intelligence. The simplest is learning by trial and error. For example, a simple computer program for solving mate-in-one chess problems might try moves at random until mate is found. The program might then store the solution with the position so that the next time the computer encountered the same position it would recall the solution. This simple memorizing of individual items and procedures—known as rote learning—is relatively easy to implement on a computer. More challenging is the problem of implementing what is called generalization. Generalization involves applying past experience to analogous new situations. For example, a program that learns the past tense of regular English verbs by rote will not be able to produce the past tense of a word such as jump unless it previously had been presented with jumped, whereas a program that is able to generalize can learn the “added” rule and so form the past tense of jump based on experience with similar verbs.

## **Reasoning**

To reason is to draw inferences appropriate to the situation. Inferences are classified as either deductive or inductive. An example of the former is, “Fred must be in either the museum or the café. He is not in the café; therefore, he is in the museum,” and of the latter, “Previous accidents of this sort were caused by instrument failure; therefore, this accident was caused by instrument failure.” The most significant difference between these forms of reasoning is that in the deductive case the truth of the premises guarantees the truth of the conclusion, whereas in the inductive case the truth of the premise lends support to the conclusion without giving absolute assurance. Inductive reasoning is common in science, where data are collected and tentative models are developed to describe and predict future behavior—until the appearance of anomalous data forces the model to be revised. Deductive reasoning is common in mathematics and logic, where elaborate structures of irrefutable theorems are built up from a small set of basic axioms and rules.

# Industries Thriving During the Pandemic



The Covid-19 pandemic — perhaps the most unprecedented event of our time — has really been multiple pandemics in one. While not everyone has been infected, it is safe to say that every human being on the planet has been affected.

As bleak as these statistics are, some industries have been doing well during the pandemic and will likely continue to do so after it's gone. These industries provide hope for the economy as well as overall individual well-being. Let's look at which industries have been successful and why

## 1. Cleaning Services

Given fears about the spread of the coronavirus, professional cleaners have been in high demand to sanitize restaurants, offices, commercial buildings, medical centres, homes and public spaces. Clients want more frequent deep cleaning to keep themselves and their constituents safe.

## **2. Delivery Services**

People are afraid — or, in some cases, not even allowed — to leave their homes. So, they are making what they need come to them. The most frequent types of deliveries are food and corporate retail items.

## **3. Grocery Stores**

With some restaurants closing and stay-at-home guidelines in place, people are stocking up on supplies and eating more at home. Large and small grocers alike have seen a spike in demand. In fact, smaller grocery stores have been helping larger stores meet demand and restock items. Top sellers include toilet paper, hand sanitizer and frozen food.

## **4. Liquor Stores**

Just as restaurants are closing, so are bars, leading to increased sales at liquor and wine stores. Not only are people turning to alcohol for drinking but also for making hand sanitizer.

## **5. Game Companies**

Because people can't go out for entertainment, they are bringing the entertainment to them, investing in board games and puzzles to stay busy at home. Educational video games have been in high demand for children who are not attending school.

## **6. Fitness Equipment Companies**

With gyms across the country closing and not everyone having easy access to parks, backyards, sidewalks or trails, people need to keep up with their fitness regimens at home. Yoga mats have seen one of the highest increases in sales of fitness equipment. Internet-connected fitness tools are also being used more.

## **7. Telehealth Services**

Many people are reluctant to leave their homes at all, let alone go to doctors' offices where they risk being exposed to the coronavirus. Thus, many are choosing to see their providers virtually. In the U.S., the use of telehealth services has increased an estimated 50% since the beginning of the pandemic.

## **8. Tutoring Services**

Given the transition from in-person learning to virtual learning, many parents are worried about their children falling behind academically. Teachers are also overworked during this transition. In many districts, students were unlikely to get quality, personalized time with their teachers before the pandemic, and now it is even less likely. Private tutors help fill the gap that many students are experiencing.





## 9. Tech Companies

Working from home would be a lot harder without software that allows for videoconferencing and virtual project management and communication. Remote work software helps employees stay productive no matter their location. Furthermore, people are turning to technology for social interaction amid stay-at-home orders, using social media and virtual hangout systems. Video streaming services have also kept people entertained at home.

## 10. Healthcare Workers

We must not forget to acknowledge the doctors, nurses, physician assistants, medical assistants, emergency responders and other healthcare workers who have provided testing and tended to patients who have tested positive for Covid-19. They have been in high demand and are part of an industry that will see immense growth.

No matter the situation in which we find ourselves, human beings are resilient and have always found a way to adapt. The fact that so many industries are thriving even while others are not seeing the same success provides hope that we will be able to cope with the challenges presented by Covid-19 and come out stronger.

# FACT CHECK: INTERESTING 6 FACTS ABOUT GOOGLE

By  
**Ravina Chavhan**  
(Third Year)

Google is the number one search engine. Well, it not only helps you to access what you wish to find or would like to know, but is a good escape when your parents come to check upon you. We know it guys, we know it. How you hide your content searched when someone's peeping into your screen by changing tabs or searching random things on Google, we know it all. However, here are 7 facts about Google that are rarely known. (Well, we Googled it too!)

## FACT 1

When you perform a Google search, the machine checks the Google index to determine the relevant search results to be displayed to you. The search engine considers 200 factors before displaying the best results for your query. Google has its own algorithm called GoogleBot to generate search results.

## FACT 2

Google owns a cluster of domains such as Google.com, Gogle.com and Googlr.com which directs to Google.com, which indeed is understandable. However, it also owns 466453.com, which is inspired by the telephone keypad. If you inspect closely, you will notice the numbers match up to letter like: 4- GHI, 6- MNO, 6- MNO, 4- GHI, 5- JKL, 3- DEF, thus decoding 466453 to be GOOGLE.

## FACT 3

When Google was founded in September 1998, it handled Ten Thousand (10,000) search queries per day. Currently, there are more than Two Million (2,000,000) search queries per second. The search engine finds a Trillion unique URL's on the web. Searches many Billion sites a day and processes numerous searches every day.

## FACT 4

Google takes on the best projects that changes the world for Millions. In 2012, Google introduced the Cherokee language in Gmail. This is the first Native American Tribal language added to the list. Also, Cherokee was added to its recently launched virtual keyboards in Gmail.

## FACT 5

On 30 August, 1998 the concept of Google Doodle was introduced when company co-founders Larry page and Sergey Brin added a simple stick figure drawing in place of second "o" in Google. This doodle was made to notify Google users that the founders were "Out of Office" at the Burning Man Festival. So, the first Google Doodle was made in Nevada desert.

## FACT 6

Well, Google is the only company with a clear goal to reduce the amount of time people spend on its site. Google Engineers are encouraged to spend about 20 percent of their work time on projects that interest them using a policy often called as Innovation Time Off.

# ART





**SHIVAM SINGH**



**ANIKET JADHAV**



**RAVINA  
CHAUHAN**

**PRAMOD KOLTE**



**TANASHREE  
KUMBHAR**



# Literature



# आई

## माझी आई

माझी आई, माझी आई,  
आवडते मजला माझी आई,  
तिच्या एका स्पर्शाने क्षीण दिवसाचा जाई ॥ १ ॥

आठवते अजुनी मजला, माझे बालपण  
कुशीतच आईच्या स्मायचं माझं मन.  
ना कसली होती चिंता, ना कसली होती खंत,  
जे जे हवेसे वाटायचे, ते ते असायचे हातात.  
आई तुझ्या मायेची महाराई, कोणी मोजूच शकत नाही  
माझी आई, माझी आई आवडते मजला माझी आई ॥ ११ ॥

हात धरुनी आईचा, पहिले पाऊल टाकिले,  
मी तिच्याच डोळ्या मध्ये, प्रथम विश्व पहिले,  
मी उगाच झालो मोठा, दूर गेले बालपण  
हरवून बसलो स्वतःला, उगा आले शहाणपण  
माझे मलाच कळत नाही, कसा होऊ तुझा उतराई  
माझी आई, माझी आई आवडते मजला माझी आई ॥ १२ ॥

# Echoes Of Life

Life's a journey, a winding road,  
With moments of joy and burdens to hold.  
It's a canvas we paint, with colors so bright,  
Each day a new stroke, in the day and the night.


Sometimes it's a challenge, a steep uphill climb,  
But with hope as our guide, we conquer each time.  
It's a symphony of laughter, and tears that we weep,  
A story of memories, both shallow and deep.

Life's a gift, a treasure so rare,  
Filled with love, compassion, and moments we share.

It's a lesson in learning, a path to explore,  
With opportunities knocking, at every new door.

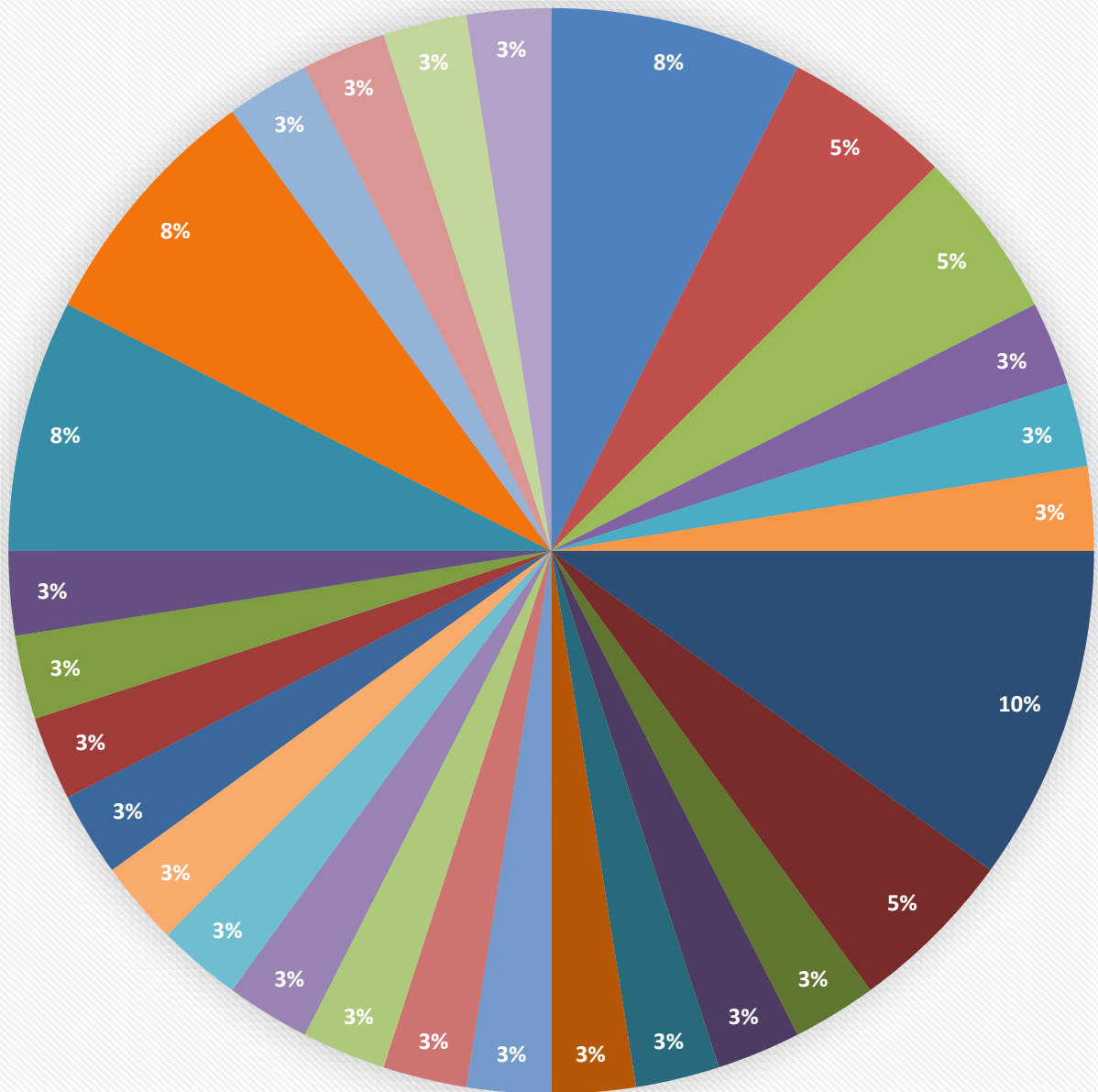
In the end, it's a journey that's uniquely our own,  
A legacy of moments, seeds we have sown.  
So embrace every second, with all of your might,  
For life is a beacon, forever burning bright.





# Placements 2020-21

## Students Placed in 2020-21



- |   |                                 |
|---|---------------------------------|
| ■ Accenture                               | ■ Amazon                        |
| ■ Amdocs                                  | ■ Atos Global                   |
| ■ Axyya Digital                           | ■ Birlasoft                     |
| ■ Biz Secure Labs Pvt Ltd                 | ■ Capgemini                     |
| ■ DXC Technology                          | ■ Emtec                         |
| ■ EQ Technologic                          | ■ Excellon Software Private Ltd |
| ■ Extentia Information Technology PVT LTD | ■ Extrentia                     |
| ■ FIS                                     | ■ GNS Engineering India Pvt Ltd |
| ■ Hexaware                                | ■ L Cube                        |
| ■ Online State Board Govt. Maharashtra    | ■ Pricewater House Coopers      |
| ■ PTC Software India Private Limited.     | ■ Sagitec                       |
| ■ TCSL                                    | ■ TIBCO                         |
| ■ Verificient Technologies                | ■ VuNet Systems                 |
| ■ Xoriant Solutions                       | ■ Zensar Technolgy, Pune        |

**THANK  
YOU**

# TECHZINE



DEPARTMENT OF COMPUTER ENGINEERING