

Machine Learning

-Mr. S. R. Khole

Machine learning is an application of artificial intelligence (AI) that provides systems the ability to automatically learn and improve from experience without being explicitly programmed. Machine learning focuses on the development of computer programs that can access data and use it learn for themselves.

The process of learning begins with observations, such as examples, direct experience, in order to look for patterns in data and make better decisions in the future based on the examples that we provide. The primary aim is to allow the computers learn automatically without human intervention and adjust actions accordingly. Machine learning algorithms are often categorized as supervised or unsupervised.



Supervised machine learning algorithms can apply what has been learned in the past to new data using labeled examples to predict future events. Unsupervised learning studies how systems can infer a function to describe a hidden structure from unlabeled data.

Cont. from page 1 Police Duty Management

Each policeman is personally informed about instructions or notifications without being present physically at the duty allocation spot as during *Wari* reaching the duty allocation spot itself is a challenge for the policeman due to non availability of any mode of fast travel. Officers and policeman can make phone calls to each other for information sharing. The app works both in online and offline mode therefore in case of network congestion there is no confusion for smooth working of the admin-

istration. The policeman can know the other team members on duty with them. Location of the policeman can be tracked while marking the attendance hence; no policeman leaves his/her duty point. Controlling officers can also generate various reports like absenteeism report, allocation report, memo report, duty chart etc. in single click. This project is developed by teachers Mr. S. A. Zambare, Mr. A. S. Bhise. A.S. Bhatlavande, Mr. P. S. Bhandare and students Siddhesh Khadake, Tejas Patil, Yashraj Chavan,

Dhawal Dyavanpalli, Rohit Konde, Prajwal Bendale, Abhishek Warpe and Atharv Ruplag.

Cont... Machine Learning

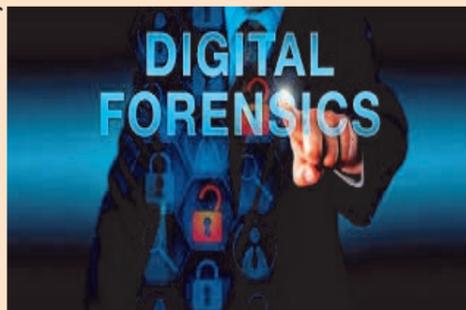
Reinforcement machine learning algorithms is a learning method that interacts with its environment by producing actions and discovers errors or rewards. Trial and error search and delayed reward are the most relevant characteristics of reinforcement learning.

Digital Forensics

-Rutik Deshpande, (TY-IF)

In simple words, Digital Forensics is a branch of forensic science related to the use of digital information produced, stored and transmitted on computers as source of evidence in investigations and forensics. Encompassing the recovery and investigation of material found in digital devices, often in relation to computer crime.

The term digital forensics was originally used as a synonym for computer forensics but has expanded to cover investigation of all devices capable of



storing digital data. Traditionally it has been associated with criminal law, where evidence is collected to support or oppose a hypothesis before the courts. Digital forensic analysis of these types of system and networks can provide digital evidences e.g. planning a murder, cyber

harassment, pornography, theft of electronically stored information and data generate fraudulent documents with the help of scanners and printers. So the role of Digital investigation in solving the case can lead to a complete change in the investigation if the same is done properly. As the world continues to cover deeper and deeper into digital technologies and devices, it will be critical for most law firms to develop a well thought out strategy for digital forensics.

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Message From HOD

It is our pleasure to present first issue of news letter "TANTRA" of our department to all student's. This news letter is one of the ways in which we can disseminate the information about department. It covers various technological articles, departmental activities, achievements of students and staff members.

I wish you all Happy Independence Day..!

Mr. A. S. Bhise

Police Duty Management Android App

-Mr. S. A. Zambare

Pandharpur is known as the South Kashi of India, where there are total four *Waris* (Quarterly Pilgrimage) held every year in Pandharpur. The pilgrims from all over Maharashtra as well as from different states of India visit Pandharpur. So, handling the *Wari* without any inconvenience is the biggest challenge before the administration and Police Department. Therefore, Solapur Rural Police sponsored one project on Online Police Bandobast (Management) System which is named as BAAS (Bandobast Allocation and Attendance System). According to their requirement, a website and an Android App are developed for distributing and there was successful execution of BAAS. In the month of March 2019, MSBTE organized State Level Project Competition at Sanjay Ghodawat Polytechnic Kolhapur. In the project competition, the project received the second prize worth Rs. 50,000. Similarly, in SKN Sinhgad College, Pune the project achieved the best project award worth Rs 21,000/-



this software was held in the month of December 2018 for VIP *Bandobast*. After that, it has been used in various Police *Bandobast* like General Election-2019, *Magh Wari*, *Chaitra Wari* and recently this application is used in holiest *Wari* of Maharashtra i.e. *Ashadhi Wari* 2019 and

police department can control the duty allocation and attendance of each and every on duty official. In case of any emergency, duties can be rearranged as per the availability of the reserve staff.

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Dark Web

-Ajinkya Bahirat, (TY-IF)



The dark web is the World Wide Web content that exists on darknets, overlay networks that use the Internet but require specific software, configurations, or authorization to access.

The dark web forms a Freenet, I2P, and Riffle small part of the deep web, the part of the Web not indexed by web search engines, although sometimes the term deep web is mistakenly used to refer specifically to the dark web. The darknets which constitute the dark web include small, friend-to-peer networks that use the Internet but require specific software, configurations, works, as well as large, popular networks like Tor, routing.



RECENT TRENDS IN IT

Smart Assistant (Asus Zenbo) Atharv Pailwan (TYIF)

The Taiwanese electronics man- Asus chairman, said: “For de-
 defacture Asus has unveiled a ades, humans have dreamed of
 home robot called Zenbo that owning such a companion: one
 can talk, control your home and that is smart, dear to our hearts,
 provide assistance when needed and always at our disposal. Our
 – all for the cost of a top-end ambition is to enable robotic
 smartphone. Jonney Shih, the computing for every household.”



Sport Achievement's

MSBTE has organized Zonal Level Sport competition in the year of 2019. In that competition our students got prizes in various events.

1. Sanket Gajare (Winner-Badminatan)
2. Ajinkya Bahirat (Winner-Badminatan)
3. Onkar Bhosale (Volleyball wining team member)
4. Makarand Khiste and Sudarshan Makar (Runner up - chess)

Congratulations all...

Training Attended

Faculty	Workshop
Ms. C. N. Gund	Industry 4.0
Mrs. G. J. Khare	Industry Consulting
Mr. L. B. Deth	High Speed Digital System
Mr. S. R. Khole	R-Programing



Artificial Intelligence The Power of Applied Intelligence

Mansi Chalkikar (SY IF)

A year spend in AI are creating robots to believe in god”. AI is the very common in many new buzzword of the 21st century. Artificial Intellig- of problems of surgery of geance is coming in to our lives faster than we had anticipated. It's making sure that it knows about you more than you do. AI is not specially related to computer science. This is field of study that encompasses human behavior, biology, psy- patients etc. The chology and even lan- “SOPHIA” is biggest creature of AI. The Saudi Arabian granted Sophia of AI for analyses satellite citizenship. The ad- images which areas are vantages of AI are power- highest poverty level, ful and useful gadgets, Gate allocation for plane self-problem-solving ap- while landing, ticket price proach, better handling of determination, companies information.



Further it would be situation like “AI propos- es and MAN disposes”, because AI is like two edges of sword at one end it solves problem intelli- gently and other end it has problem themselves. So, we have to handle it properly. AI is boon or ban for humankind is depend upon how we use it as “we should give and take respect from and to technology”. Otherwise human should be worried about the treat posed by AI. The popular slogan for AI is “By far, the greatest danger for AI is that peo- ple conclude too early that they understand it”.

MSBTE Summer 2019 Examination: Our Ranker's

Sr. No.	Name of Students	Class	Percentage	Rank
1	Surwase Vasudev Eknath	F.Y.	94.75	First
2	Nimbalkar Varhrsha Haridas	F.Y.	90.50	Second
3	Ghadage Punam Rajaram	F.Y.	88.50	Third
4	Sayyad Gausiya Ayub	S.Y.	93.60	First
5	Koli Ashutosh Shankar	S.Y.	90.50	Second
6	Bahirat Ajinkya Atul	S.Y.	88.60	Third
7	Londhe Akshara Shashikant	T.Y.	90.06	First
8	Patil Ujjawala Uttam	T.Y.	89.47	Second
9	Ligade Atharv Rajeshwar	T.Y.	87.06	Third

EDITORIAL

It gives us great pleasure to present the first issue of our Department newsletter “TANTRA”2019, which gives us the opportunity to focus the achievements in our department and new trends in Computer Engineering field.

We are thankful to all the students and faculties who have contributed during the preparation of this newsletter. We have tried our best and given positive efforts, expecting creative responses from everyone to continue the flow of knowledge through this quarterly newsletter.

Editor –Mr. S. A. Zambare
 Co-Editor – Mr. S.R. Khole

Workshop

Department has organized 40 days workshop on Python for third year students and 15 day workshop on PHP for second year students in the collaboration with TechnoWings International IT Solution. The main motive of such workshop is to bridge gap between Academics and Industry.



Wish you Happy 73rd Independence day

Our Vision

To Provide diploma education strengthened with basic knowledge and skills along with professional ethics enabling students to reach higher goals in the filed of Information Technology

Our Mission

1. To impart value based technical education in Information Technology
2. To support the students for technical knowledge in the field of Information Technology
3. To make students efficient in various skill sets in Information Technology
4. To encourage students for lifelong learning

Virtual Reality -Makarand Khiste (SY IF)

Virtual Reality is the use of computer technology to create a simulated environment.

Unlike traditional user interfaces, VR places the user inside an experience. Instead of viewing a screen in front of them, users are immersed and able to interact with 3D worlds. And that 3D world is provided by virtual reality.

Virtual Reality is used in

various fields like educa- Computer-Aided Design (CAD).
 tion, medical, military, sci-
 entist, and etc.

The first actual VR head-mounted display (HMD) was created in 1968 by computer scientist Ivan Sutherland. Sutherland was one of the most important figures in the history of computer graphics, having developed the revolutionary “Sketchpad” software that paves the way for tools like



Robotic Process Automation (RPA) -Amardip Madhukar Pawar (TY IF)

RPA can be used to automate workflow, infrastructure back office process which are labor.

Intensive these software bots can interact with an in-house application, website, user portal,

etc. The RPA is a software program which runs on an end user's pc, laptop or mobile device. It is a sequence of commands which are executed by Bots under some defined set of business rules.

The main goal of Robotics process automation process to replace repetitive and boring clerical task performed by humans, with a virtual workforce. RPA does not require the development of code, nor does it require direct access to the code or database of the applications. Robotic process automation 2.0 often referred to as unassisted. RPA is the next generation of RPA related technologies. Technological advancements and improvements around artificial intelligence technologies are making it easier for businesses to take advantage of the benefits of RPA without dedicating a large budget for development work.

