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He shrugged sightly "Ansat, The and held at her wein and torough has in face him. Their Sectores ages strend in the first light, and he was only a dark shape. in front of her, but he will held her wrist and his the lot himse strength which had not

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Another, I've advalid you'll have to passe again, Spirit-Adding, with a train of averaging "Also, | colhelp being that Plan ever have been right, when its requested that this Meeting chep may have bet trying to make assesse."

From wrighted unconductably. "N's all out grown-up talk," die said impatiently. "I die! understand half of it. But I'm entable but many " be nice to people who are bound to Debrie."

"As if any of an would," Deplete enderter warmly, robbing her gold head against lights shoulder. "She can chask pri nor healty a pusteal forther than that,"

"You're deriver." Spins Starsed impulsively and glassed across at Martin. But for once the lordid not respond. He had taken a stick from he packet, and was whitting it into the waste-party were she shall not tell. The could only survive through instinct above that he was set in when incurted agreement with her strikeds; that, young a he was, he was conscious that her outlook we exceptibily demining and must be importantly outschered before his manufact polynomic model accept-

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singless: "I cause with making this combinitable." He besitated, then bitried out, a were smale on in this, pleasant face: "Physically, yes, Mentally,

the located at him in domary. This was not at in how cleans ought to talk, she box more,

What do you mean?" she countered. "Mary I special"

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"My dear blue Proyte, within a low hours of my stored is was being toward as though I were a loper." belowers out hours, "Tour brother is not so had, but the lattice god first when the new not, and he by your they many - by housed slightly- when I first interested her posing his me also seemed quite heres. the interaction of the ball a possibilities where I metarally want to know what I we done to the pie all and, as the wor'l explain, I've store

"I don't use why you should expect her to all for THE." The toted hard to maintain as air of dignified



A TRIBUTE TO DR. AKHILESH DAS GUPTA

प्रेरकः सूचकश्वैव वाचको दर्शकस्तथा ।

"THERE IS NO GREATER TRIBUTE TO A GURU THAN TO MAINTAIN THE HIGH STANDARDS HE LIVED BY; DR. AKHILESH DAS GUPTA'S LEGACY **IS ONE SUCH THAT WILL LIVE ON THROUGH HIS EMINENT STUDENTS AND THROUGH THE BEAUTY OF HIS CHARITABLE WORK;** THERE WAS AN INTENSITY THAT HE **BROUGHT TO EVERY MOVEMENT AND THOUGHT HE EXPRESSED; AN INSPIRING SOUL, A VERSATILE GENIUS, A NOBLE TEACHER WHOSE IDEAS WILL LIVE FOREVER WITH HIS CHARM."**

शिक्षको बोधकश्चैव षडेते गुरवः स्मृताः ॥

OUR Patrons



Late Shri Babu Banarasi Das Ji (1912-1985)



Late Dr. Akhilesh Das Gupta (1961-2017)



Mrs. Alka Das Gupta



Mrs. Alka Das Gupta

Co-founder & Chairperson BBD Group of Education

Innovation requires passionate explorers who propel transformation at work place. With ever changing global scenario, the key to success is responding to the complex and rapidly changing issues in the world of information technology. The Department of Information Technology of ADGITM is always in making efforts to justify these points.

We impart education that is based on consciousness and we rear a breed of young minds that are bustling with selfconfidence, motivation and ever ready to take up challenges .The campus, sports and academic facilities all bear testimony to this effort. In order to promote an internationally acceptable education, our key focus has been on overall development.

The proficiency in computing technology has become essential for modern day managers, business leaders, entrepreneurs and other professionals. It is a welcome development. I look forward to PLXION 2020 setting a higher pedestal!

I wish to PIXION editorial team a grand success!



Shri Viraj Sagar Das

President BBD Group of Education

I feel so delighted to find that the path of creativity and innovation is consistently followed by the Department of Information Technology. It always encourages its students to actively participate and compete in various competitions and events to show their abilities towards the new platforms of technology,

A great part of the magazine is the fact that it brings us a bouquet of topics which are of utmost relevance and interest to all. It is a great pleasure for me to get to know of all the activities and achievements of the Department of Information Technology of Dr. Akhilesh Das Gupta Institute of Technology & Management in the form of such an interactive read.

I convey my best wishes for the success of PIXION 2020.



Mr. S. N. Garg Chief Executive Officer Dr. Akhilesh Das Gupta Institute of Technology & Management

Through the guidance of trained and inspired leaders, the students are taken across the gap of their present knowledge and experience and place data level of knowledge and competence that enables them to immediately step into the high standard of efficiency required in today's world of development.

We aim to cultivate talents by closely nurturing them throughout the whole programme. We are unique in terms of our programs, academic structure and core values. Our students are our assets. We develop our students to open them up in front of global scholarly endeavour. While the whole world is running after chances, it is essential to create your own opportunity.



Prof. (Dr.) Sanjay Kumar

Director Dr. Akhilesh Das Gupta Institute of Technology & Management

In his book On Becoming a Leader, Warren Bennis wrote, "No leader sets out to be a leader. People set out to live their lives, expressing themselves fully. When that expression is of value, they become leaders. So the point is not to become a leader. The point is to become yourself, to use yourself completely - all your skills, gifts and energies - in order to make your vision manifest. You must withhold nothing. You, must, in sum, become the person you started out to be, and to enjoy the process of becoming." We at Dr. Akhilesh Das Gupta Institute of Technology & Management believe in helping students to manifest their vision completely. How do we do this? We offer a rigorous education program rooted in all forms of practice, coupled with a vast array of electives and opportunities that come from our position of being affiliated to a major university. We give you the tools to continue learning and growing long after you leave our doors; we create opportunities for internships and experiences that broaden your horizons. I take this opportunity to express the fact that every effort is made to improve the existing best services to bring out the best for the welfare of our institution and the growth of our students.



Dr. Prashant Singh

HOD

Department of Information Technology Dr. Akhilesh Das Gupta Institute of Technology & Management

Welcome to have a view of the achievements and activities of the Department of Information Technology with the help of this semester publication of PIXION.

We are proud of our strong academic programs, which are based on theoretical and practical knowledge and match well with the requirements and demands of the industry. We have been working in the field of AI & ML (Artificial Intelligence and Machine learning) which is an emerging technology. We are committed to students by offering short term courses and pre placement training classes that foster critical and analytical thinking and build the necessary skills to succeed in the industry.

I am sure in times to come, many students from our department will make indelible mark nationally and internationally in the field of Information Technology and make us proud. The hard-working students, a young and dynamic faculty, whose expertise spans the range of disciplines in computer science stream and a very healthy work-culture, are the basic elements that comprise the Department of Information Technology.

The ADGITM Management



Ms. Pankhuri Aggarwal Asst. Director(HR)

Dr. Yamini S. Principal

Mr. S. N. CEO



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Prof. (Dr.) Sanjay Kumar Director Mr. Dilip Singh Sr. DY. Director (Construction)

ADGITM VISION & MISSION

VISION

"To produce globally competent and socially responsible technocrats and entrepreneurs who can develop innovative solutions to meet the challenges of 21st century."

MISSION

- To provide value-based education through multi-grade teaching methodologies and modern education facilities.
- To sustain an active partnership program with industry and other academic institutes with an aim to promote knowledge and resource sharing.
- To conduct a value-added training programme to enhance employability.

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Our Recruiters Events Section Editorial's Section Gallery

PIXION



"EDUCATION IS NOT THE LEARNING OF FACTS, BUT THE TRAINING OF THE MIND TO THINK." -ALBERT EINSTEIN





DEPARTMENTAT A GLANCE

Department of Information Technology is committed to the values of: -Teamwork; -Reliability; -Professionalism & Integrity; -Efficiency & Effectiveness; -Innovation; -Excellence; -Accountability; -Continuous Improvement & Collaboration. VISION:

"To produce successful IT graduates with a strong technical background and managerial skills for promoting growth in industry and society."

MISSION:

M1: To provide managerial and professional skills among the students through value added programs.

M2: To provide an atmosphere where faculty and students can be engaged in continuous learning and contribute in the overall growth of the society.

M3: To provide industry oriented technical environment to help students excel in diversified fields.



FACULTY SECTION

5



OUR MENTORS

Our faculties are renowned scholars and accomplished practitioners who are actively engaged in the academic excellence and innovative research ideas of the world. The service of the teachers in creating personally mature, professionally equipped and service oriented graduates is really worth mentioning. We strongly believe in academic excellence and do not compromise on teaching standards or discipline. These three things are the main pillars. It has been the constant endeavor to comfort students with all the necessary the knowledge and skills. Whatever career a student may choose to take, hard work and discipline are the sure roads towards success. And the faculty of IT Department always supports students in achieving those golden ambitions and also ensure that their stay in the college is meaningful and fruitful as well.

FACULTY PUBLICATIONS AND FDPs

- 1. Research Writing Skills, May 2020
- 2.IOT Workshop, May 2020
- 3. Moodle- Learning Management System, May 2020
- 4. Technological Advancements in the field of Electronics and Telecom Engineering, May 2020

Ms. Charul Dewan

Ms. Monica Batra

- 1. Emerging Trends in Information Technology, July 2020
- 2.Moodle- Learning System, May 2020
- 3. Applications of Machine Learning and Deep Learning, June 2020
- 1. Published paper on "RKT2FCM: RBF Kernel-Based Type-2 Fuzzy Clustering", ICICC, Feb 2020
- 2.Moodle- Learning Management System, May 2020
- 3.Emerging Trends in Information Technology, July 2020
- 4. Python Programming, Infosys, June 2020

Ms. Saijal Gupta

Management ____

Ms. Gunjan Chugh

- 1.Moodle- Learning Management System, May 2020
- 2. Emerging Trends in Information Technology, July 2020
- 3.Applications of Machine Learning and Deep Learning, June 2020
- 4. Recent trends in Computer Science & IT, July 2020

FACULTY PUBLICATIONS AND FDPs

- 1.Computational Intelligence : COIN-2020, June 2020
- 2. Emerging research trends in computer science and IT, June 2020
- 3. Moodle- Learning Management System, May 2020
- 4. National Conference on "Recent advancements in science and technology NECRAST-2020, July 2020
- 5. National Conference on "New Challenges and Opportunities in the Wake of COVID-19, July 2020
- 6. Quiz on IOT and Python, July 2020
- 7. Webinar on Cyber Crime against Women: challenges and safety measures, July 2020
- 8. Webinar on Machine Learning Using

Mr. Devender Banga

- Python, May 2020
- 1. Published paper on "RKT2FCM: RBF Kernel-Based Type-2 Fuzzy Clustering", ICICC, Feb 2020
- 2.Moodle- Learning Management System, May 2020
- 3.Emerging Trends in Information Technology, July 2020
- 4. Python Programming, Infosys, June 2020

Ms. Arushi Gupta

Dr. Preety Verma Dhaka

- 1.Moodle- Learning Management System, May 2020
- 2. Emerging Trends in Information Technology, July 2020
- 3.Applications of Machine Learning and Deep Learning, June 2020
- 4. Recent trends in Computer Science & IT, July 2020

STUDENT'S SECTION

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ALUMNI SPEAK



Shivam Aggarwal Customer Project Specialist, Cisco

ADGITM provides an amazing learning platform to its students so that they can do wonders for themselves.

The department of Information Technology has some excellent faculties who not only explain the concepts thoroughly but also make sure that everyone understands the core basics. Apart from the curriculum, there are a lot of societies/clubs which

helps to develop all-round skills and boosts confidence in students.

I consider myself lucky to have completed my graduation in Information Technology at this college. I would like to thank ADGITM for building my career and laying the foundations to realize my aspirations.

TECHNICAL ARTICLE

Advanced Driver Assistance Systems (ADAS)

The role of ADAS is to prevent deaths and injuries by reducing the number of car accidents and the serious impact of those that cannot be avoided.

Essential safety-critical ADAS applications include:

- Pedestrian detection/avoidance
- Lane departure warning/correction
- Traffic sign recognition
- Automatic emergency braking
- Blind spot detection

VGG16 : The ImageNet Large Scale Visual Recognition Challenge (ILSVRC) is an annual computer vision competition. Each year, teams compete on two tasks. The first is to detect objects within an image coming from 200 classes, which is called **object localization. The second** is to classify images, each labeled with one of 1000 categories, which is called image classification. VGG 16 was proposed by Karen Simonyan and Andrew Zisserman of the Visual Geometry Group Lab of Oxford University in 2014 in the paper "VERY DEEP CONVOLUTIONAL NETWORKS FOR LARGE-SCALE IMAGE RECOGNITION". This model achieves 92.7% top-5 test accuracy on ImageNet dataset which contains 14 million images belonging to 1000 classes. **Types of Emotion** : There are seven basic emotions namely, sadness, happiness, surprise, anger, fear, disgust and contempt.

ADABOOST ALGORITHM : Adaboost is an ensemble learning algorithm. It takes a collection of classifiers – called weak learners or base learners (like a rule of thumb). It combines them to produce a strong classifier. What's a strong classifier? One that will produce good results on unseen data!Face detection requires a binary classifier (face versus non-face)

The Scale-Invariant Feature Transform (SIFT) bundles a feature detector and a feature descriptor. The detector extracts from an image a number of frames (attributed regions) in a way which is consistent with (some) variations of the illumination, viewpoint and other viewing conditions. The descriptor associates to the regions a signature which identifies their appearance compactly and robustly. In the proposed approach they have used pre-trained Convolutional Neural Network (CNN) to extract high level features. VGG16 is trained on ImageNet dataset consisting of a large number of images and having 1000 classes. In their framework, they fine-tune two VGG16 networks on ROI images and facial landmark points, separately for the datasets VIVA FACE, DriveFace, JAFFE, MMI and CK+ to learn facial and landmark features, thereby improving the recognition accuracy. The output of the face detection module is the ROI containing the face region and the landmark points on the face. We give these as input to two separate fine tuned VGG16 networks and integrate the extracted features using weighted summation to classify the facial expression and discover the emotional state of the driver

Ms.Saijal Gupta (Assistant Professor) Anubhav (Student , IT)

Paper discussion of Deep Residual Learning for Image Recognition

As deep neural networks are difficult to train, this paper provides a framework that makes the training of substantially deeper networks more easier than previous networks.

Convolutional neural networks have proved to get better results when the network was "deeper", i.e. when the number of layers were more which led to better classification of the image in an end-to-end multilayer network.

The importance of "depth" of the network can be identified by the results on the ImageNet Challenging dataset, that shows that an increase in the number of layers had resulted in a better visual recognition.

But simply increasing the length of the network can not be

done by stacking up layers as it leads to vanishing/exploding the gradients which hampers the convergence from beginning which leads to a degradation problem; accuracy gets saturated, and then it degrades rapidly. Experiments in this paper showed how adding more layers to a suitable deep model leads to high training error.

The conducted experiment was as follows:
1. This paper used a model with shallow architecture and a deeper part that can add more layers onto it.
2. Now, the existence of the counterpart solution indicates that a deeper model should not produce higher training error than its shallow counterpart.

3.But the results showed that these networks were not able to find comparable/good solutions.

Deeper networks were supposed to perform better than shallow networks or at least similar to the shallow network as the part in the deeper networks could mimic the shallower network by learning the identity connections, but that was not the case.

As the training error of the deeper network was higher, it indicated that simply increasing the number of layers was not suitable, which led to the concept of deep residual networks. Using a deep residual learning framework on ImageNet to show how it overcame the degradation problems, this paper proved that it was extremely easy to optimize deep residual nets when compared to networks that simply stacked up layers. Also, the deep residual network accuracy had high accuracy gains from greatly increased depth, producing results substantially better than previous networks. This paper shows how these residual networks can help in gaining accuracy and can optimize in a deep network. Implementation of this paper led to an improvement on the visualization of the COCO object detection dataset by 28 percent.

Ms.Priyanka Singh,CSE (Assistant Professor)

Abhishek Garg (Student, IT)

ARTIFICIAL INTELLIGENCE(AI) TRENDS IN ROBOTICS SECTOR

Robots were the first-known automated type machines people got to know. There was a time when robots were developed for performing specific tasks, yes such machines were earlier developed without any artificial intelligence (AI) to perform only repetitive tasks.

Al has continued to create huge impacts across multiple industries and continued research has changed how Al affects the robotic industry. Presently, the innovative combination of AI and robotics has created an array of futuristic possibilities in automation. The application of AI in robotics is mainly for enhancing some industrial robotics capabilities. Al in robotics helps robots perform the crucial tasks with a human-like vision to detect or recognize the various objects. Nowadays, robots are developed through machine learning training. A huge amount of datasets is used to train the computer vision model, so that robotics can recognize the various objects and carry out the actions accordingly with right results. And, further, day-by-day, with more quality and precise machine learning processes, robotics performance is getting improved. There are different disciplines of teaching a robot through machine learning and deep learning is also used to train such models with high-quality training data for a more precise machine learning process.

Robotics in healthcare are now playing a big role in providing an automated solution to medicine and other divisions in the industry. Al companies are now using big data and other useful data from the healthcare industry to train robots for different purposes. In agriculture Al robots can perform the fruits or vegetable plucking, spraying the pesticides, and monitor the health conditions of plants. Al has been used to ensure optimum reliability and accuracy in robots. Manufacturers in the robotics industry use Al intelligence to figure out the appropriate timespan for providing holistic maintenance of the robots. This helps the customers avoid unnecessary breakdowns and the associated costs of major repairs.

Robots of the future will have the capacity to take over risky jobs like handling radioactive substances or disabling bombs. In addition, AI robots can withstand working in unfavourable environments such as extremely noisy conditions, scorching heat, and toxic environments. Consequently, AI robots will save countless lives. Thus, AI, Machine Learning and Deep Learning are set to transform the robotics industry in a huge way.

Ms. Gunjan Chugh (Assistant Professor) Shadman Afzal (Student , IT)

Activation Function in Deep Learning

The Activation Function is applied to the weighted sum of the independent variables. An activation function is a very important feature of an artificial neural network , they basically decide whether the neuron should be activated or not. It is used so that we can check whether the signal has to be sent to the next neuron layer or not.We have mainly 4 activation functions which are as follows:-

1.<u>Threshold Function</u>:-

The Curve of threshold function has a kink. It basically means yes or no that is its output could be either the 0 or the 1.



2.<u>Sigmoid Function</u>:-

It follows a probabilistic approach and it is used when we want a probability of 0 to 1 as the output. The more we are closer to top(probability>0.5) then, our output would be 1, the more closer we are to bottom (probability<0.5) then, our output would be 0. It has a smaller and better curve.



3.<u>Rectifier Function:-</u>

It is a function which is mostly used in the deep learning.After 0,it gradually increases as the sum of the weighted independent variables increases.Before 0,it is zero.Even though it has a kink in it but still it is better.it makes our dataset more complex and non-linear as deep learning models work better when dataset is highly nonlinear and complex.



4.<u>Hyperbolic Tangent Function:-</u>

It is similar to the sigmoid function except that below zero it goes to negative value that is -1 and after 0 it goes to the 1.





In general,we commonly apply the rectifier function from the input layer to the hidden layer of the neural network.Then,from the last hidden layer to outer layer,we apply the sigmoid function.The rectifier function is used to make our dataset more complex and non-linear as deep learning model works very well on complex datasets.The sigmoid function helps us in predicting the output of the neural network in terms of the probabilities.

Ms. Deepika Tyagi,CSE (Assistant Professor) Harshit Malhotra (Student , IT)

ASCENDANCE OF AI & ML

Artificial Intelligence (AI) and Machine Learning are two trending buzzwords and often used seem to be used interchangeably. While some of us perceive it as a same concept, but that's not quite the case. With my piece I would be throwing some light on these concepts respectively, hopefully which might give you better understanding. Both these terms pop up very frequently when talked about Big data, analytics, and the broader waves of technological change which are sweeping through our world. In short, Artificial Intelligence is the vast concept of machines being able to perform task at a level of human intelligence. And, Machine Learning is an approach towards the attaining the concept of AI just by being able to give machines access to data and let them learn for themselves. But, its save to say that AI & ML are both intertwined, as stated by McCarthy one of the founders of this field: AI is "the science and engineering of making intelligent machines, especially intelligent computer programs. It is related to the similar task of using computers to understand human intelligence, but AI does not have to confine itself to methods that are biologically observable". Common, misconception that is arises up here is, its usually assumed that ML is a part of Al. To keep it simple, however, if you can write a very clever program that has, say, human-like behavior, it can be Al. But unless it automatically learns from data, it is not ML : ML is the science that is "concerned with the question of how to construct computer programs that automatically improve with experience (Mitchell, 1997).

The Emergence of AI & ML

The two main ideology behind the rise of ML which is driving Al development forward are:

It will be grievous if we could program a machine in such a way that to learn things themselves, instead of teaching it to perform every single task.

And with the presence of internet, and the huge acceleration in gigantic amount of data being generated, stored and analysed. If manage to attain intelligence similar to human intelligence, then we can simply, plug them into the internet to give them access to all of the information in the world.

Neural Networks: Neural network which is also known as Artificial Neural Network, is a subsidiary of machine learning and core of deep learning. It is composed of artificial neurons or nodes. The whole concept of neural network is inspired from by human brain, it is a series of algorithms that endeavors to recognize underlying relationships in a set of data through a process that mimics the way the human brain operates. In this sense, neural networks refer to systems of neurons, either organic or artificial in nature. Neural networks can adapt to changing input; so the network generates the best possible result without needing to redesign the output criteria. The concept of neural networks, which has its roots in artificial intelligence, is swiftly gaining popularity in the development of trading systems. To sum up, I would like to quote Sebastian Thrun: Nobody phrases it this way, but I think that artificial intelligence is almost a humanities discipline. It's really an attempt to understand human intelligence and human cognition.

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Ms. Monica Batra (Assistant Professor) Piyush Raj (Student , IT)

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Lately, AI and Machine Learning may be a hot topic within the tech industry. Moreover, Artificial Intelligence (AI) is impacting the business world more than our daily lives. Al is everywhere, from gaming stations to maintaining complex information at work. Computer Engineers and Scientists are working hard to impart intelligent behaviour within the machines making them think and answer real-time situations. Al is transiting from just a search topic to the first stages of enterprise adoption. Tech giants like Google and Facebook have placed huge bets on Artificial Intelligence and Machine Learning and are already using it in their products. But this is just the beginning, over the next few years, we may see AI steadily glide into one product after another. According to Stanford Researcher, John McCarthy, "Artificial Intelligence is that the science and engineering of creating intelligent machines, especially intelligent computer programs. Artificial Intelligence is said to the similar task of using computers to know human intelligence, but AI doesn't need to confine itself to methods that are biologically observable." Simply put, Al's goal is to form computers/computer programs smart enough to imitate the human mind behaviour. Knowledge Engineering is an essential part of AI research. Machines and programs need to have bountiful information related to the world to often act and react like human beings. Al must have access to properties, categories, objects and relations between all of them to implement knowledge engineering.

Al initiates common sense, problem-solving and analytical reasoning power in machines, which is much difficult and a tedious job. Machine Learning is naturally a subset of Al.

It provides the statistical methods and algorithms and enables the machines/computers to learn automatically from their previous experiences and data and allows the program to change its behaviour accordingly. Machine Learning provides many different techniques and algorithms to make the computer learn. Decision trees, Random Forests, Support Vector Machines, K Means clustering these are just to call a couple of. Demand forecasting sales of products, predicting customer behaviour, gauging customer sentiments from their social media behaviour – these are some use cases where machine learning models are used. Machine learning algorithms work well when the input file is fairly ok. When the dimensions of knowledge explode, we'd like to seem at more efficient algorithms and techniques which is where Deep Learning finds its hotspot. OTT platforms like Netflix and Amazon Prime use Machine Learning to recommend movies supported the user's past viewing data and it constantly improves by learning from past experiences. In e-commerce, companies like Amazon and Flipkart use Machine Learning to find out the user's preferences and provides product recommendations supported previous purchases and viewing history. The application of Machine Learning within the world is humongous! Now we have a clear idea that Machine Learning and AI are not just the same. Machine Learning is one among the ways to realize AI.

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Mr. Joginder Sharma (Assistant Professor)

Sarthak Rastogi (Student , IT)

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PROCURE PERFORMANCE

Harshit Malhotra Harshit Malhotra (Student, IT) (Student, IT)



EVENTS SECTION

WORKSHOP ON MACHINE LEARNING

Dated: 16th-17th January 2020 **Venue:** Lab 2 & 3, Department of Information Technology, ADGITM, Delhi

Student Facilitator: Ms.Himanshi Jindgar (T10) **Volunteer:** Mr. Sachin Parashar (T10)

Overview of the workshop

- The curriculum consists of 3 tracks: Beginner, Intermediate, Advanced.
- Theoretical principles review.
- Hands-on activities (practical experience)
- Course Certificate of Completion
- cate.



DEPARTMENT OF INFORMATION TECHNOLOGY WITH COLLABORATION OF **COMPUTER SCIENCE AND ENGINEERING** INTERNAL SMART INDIA HACKATHON 2020

Dated: 27th-28th January 2020 **Delegates:**

- Mr. Suteerth Tripathi, Director, Inochi Care Pvt. Ltd. (Jury)
- Mr. Manan Arora (Mentor)
- Mr. Sahil Garg (Mentor)



Smart India Hackathon 2020 is a nationwide initiative to provide students a platform to solve some of the pressing problems we face in our daily lives, and thus inculcate a culture of product innovation and a mindset of problem-solving. 50 teams comprising of 6 members each participated in the event. Out of which 5 teams were selected in the software category and 2 teams were selected in

the hardware category.

Software category:

- 1. Forge of Creation
- 2. Bitbucket
- 3. Piratical
- 4. Imperium
- 5. Server Troopers



Hardware Category:1. Robogyan2. Algostic



WORKSHOP ON COMPUTER APPLICATIONS FOR THE STUDENTS OF GOVT. SARVODAYA BAL VIDYALAYA, GAUTAMPURI



Dated: 11th February 2020 **Venue:** Lab 2 & 3, Department of Information Technology,

ADGITM, Delhi.

Details of the Event:

- Students of Govt. Sarvodaya Bal Vidyalaya, GautamPuri came to ADGITM college to attend the workshop on computer applications.
- It is as per the scheme (Skill India Mission) under which the NSQF project is being run and the school has arranged an Industrial Visit for 10th class students.
- 25 students participated in the event and this was organized by the IT department.
- The topic of the workshop was "Computer Applications". The session was taken by Dr. Prashant Singh (HOD, IT) and Mr. Devender Banga (Asst. Prof., IT), followed by the demonstration taken by Mr. Ved Prakash and Ms. Veena (Lab Technicians, IT)

WEBINAR ON MACHINE LEARNING

Dated: 25th April 2020 **Objectives:** To counsel the students in the field of Machine Learning.

Speaker: Mr. Abhinash Mishra, Machine Learning Expert, CETPA

Highlights of the lecture:

- Introduction to Machine Learning.
- Discussion of various fields where ML and AI were used.
- Bifurcations of the ML were discussed.
- Steps involved in the implementation of the Machine learning model.
- How data is managed and can be used to predict future outcomes.
- Job and business opportunities in this field.
- Languages need to be learned.
- Importance of Artificial intelligence.
- Practical demonstration of ML model that detects a test case has coronavirus or not based on the training data.

Beneficiaries: B. Tech Information Technology, Second Year, Third Year, and Fourth-year students.





ONTENT COMMITTEE

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SAGAR BILWAL (STUDENT) SARTHAK RASTOGI (STUDENT)

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