

DR. AMBEDKAR COLLEGE,

DEEKSHABHOOMI, NAGPUR

DEPARTMENT OF COMPUTER SCIENCE

**VIRTUAL WORKSHOP ON EMERGING TECHNOLOGIES AND THEIR
APPLICATIONS IN COMPUTER SCIENCE .**



**DR. AMBEDKAR COLLEGE
NAGPUR, MAHARASHTRA**



Department Of Computer Science
Organizes

One Day Workshop

On

**EMERGING TECHNOLOGIES AND THEIR APPLICATIONS IN
COMPUTER SCIENCE**

Date: 29th May, 2021

In Association with

**BRILLECT TECH SOLUTIONS PVT. LTD.,
NAGPUR, MAHARASHTRA**



Dr. Arshad Shareef
(Director)

Topic: Emerging Technologies
9.30AM to 10AM



Mr. Kalpesh Pimpalekar
(Software Developer &
Team Leader)

Topic: Machine Learning
Application: A Case Study
10AM to 10.30AM



Mr. Nehal Tembhurkar
(Software Developer)

Topic: Live Website Hacking
10.30AM TO 11AM

Registration Link: <https://forms.gle/4T7MSQcs7dQ8Wt587>

Meeting link: meet.google.com/ibw-oywv-zah

Mr. Pankaj Nimbalkar
HOD

Dr. Mrs. B.A. Mehere
Principal

For Details Contact: Yamini Konar- 7028748714, Deepika Mudliar- 7758985363

REPORT

Department of Computer Science in association with Brillect Technologies Pvt. Ltd. organised one day workshop on EMERGING TECHNOLOGIES AND THEIR APPLICATIONS IN COMPUTER SCIENCE .

on Saturday , 29th of May 2021 .

Number of students present:70

The workshop was successfully executed online conducted by the Department of Computer Science, Dr. Ambedkar College, Deekshabhoomi, Nagpur.

The workshop is organized considering the exposure and to enlighten the knowledge of the students in the subject for their future. The workshop mainly focused on information regarding different technologies in the market in present time , usage of those technologies , learning it and how BrillectTechnology Pvt. Ltd.is helping to do so. It also focuses on detailed information regarding Machine learning in order to give a detailed jist about the above given subjects.

Owing to the pandemic this year the DepartmentComputer Science organized the workshop in online mode, more than **70 students** and the respective faculty members and Head of the department ,also the Director of Brillect and software developer and team leader were present .Dr. P. V. Nimbalkar,Head,Department of Computer Science gave the introductory remark and purpose of the workshop

Technical Session 1:Dr. Arshad Shareef ,Director,Brillect Tech Technology pvt. Ltd.

The first session was conducted by the **Director Arshad Shareef** himself and he started by a detailed introduction of what are the different technologies in today's market? Realtime Use of these technologies . How these technologies work Behind the screen? Scope of learning these technologies and How they are helping to do so? Taking reference of Data Science, Cyber Security , Artificial Intelligence , and Machine learning etc.

Giving a brief about Artificial Intelligence he explained how its definition is something that we still don't know yet even after its 50-70 years of

establishment. Gave the information about Sophia the Robot. Gave knowledge about Data Science as it is the technology to make sense of complicate data. Explaining it as the combination of every field whether its Computer Science, Mathematics and Statistics, Machine learning , Business and Research. Explained about why we go for python only?

Gave summary knowledge about Big Data Analytics, also explained about Dev Ops with reference to the example of Cryptocurrency. Also told about Future Scope of learning the tech.

At the end of his session he gave details regarding Brilllect and about their corporate training , project development and etc for youngsters especially for students. It's the first company in Nagpur which is tied upto a US based company to train students and provide well to do jobs to students.

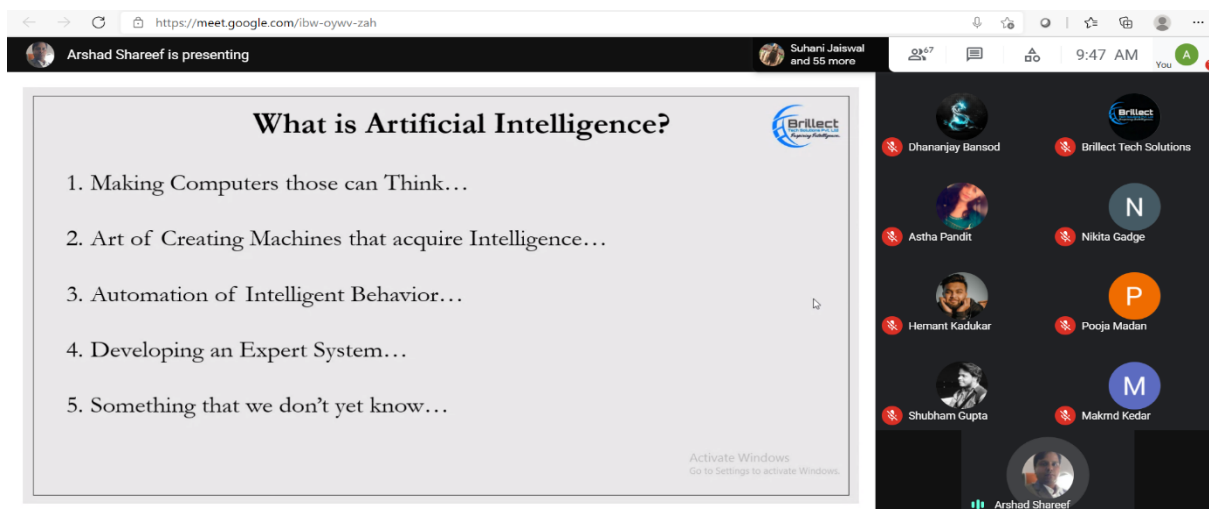
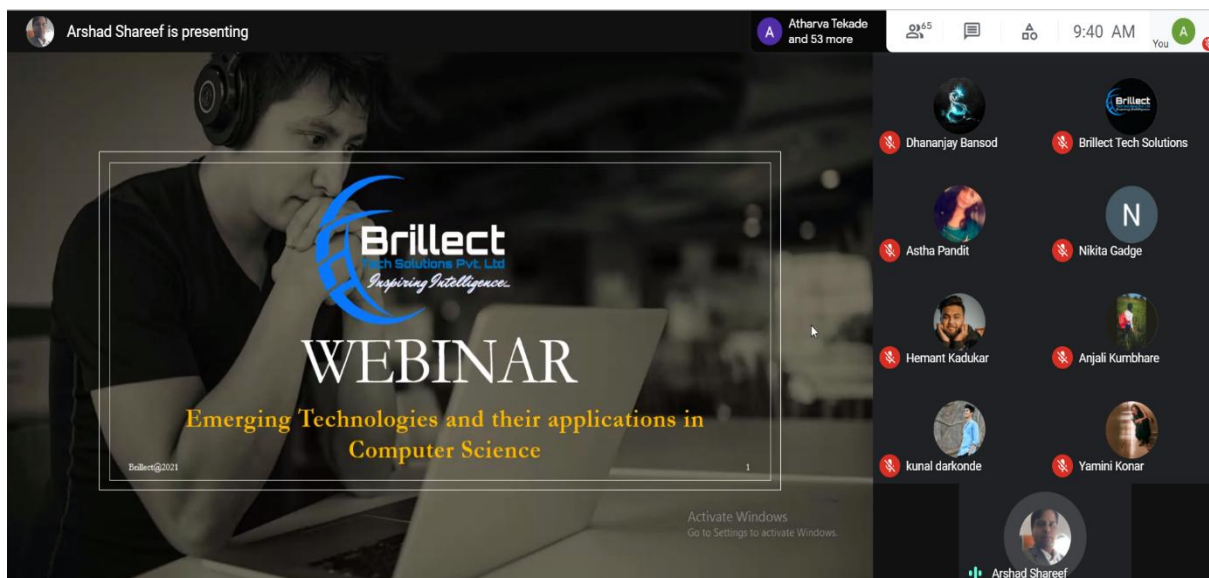
Technical Session 2:Mr.Kalpesh Pimpalekar,Team leader and Senior softwaredeveloper,Brilect Tech Technology Pvt. Ltd.

The next session was addressed by Kalpesh Pimpalekar the **Team leader and Senior softwaredeveloper**. He gave a detailed knowledge regarding Machine Learning and its Case Study. He made us understood that Machine learning is necessary to make our computer so intelligent so that they perform their own programs by only inputting the data and expected output which in turn gives us the required program. He mentioned about different types of Machine learning. He explained it by giving the example of present time You Tube videos.

Mr. Kalpesh explained in detail how does the Machine learning work. Mentioned about different scenario according to user need. Also told about the daily usage of Machine learning Algorithm. According to him python is very good option to get a good hold on languages and for Machine learning and Artificial Intelligence Python is must. He explained us about future scope of ML like in Automotive Industry, Robotics, QuantamComputing , Computer vision , Business Analytics and etc. He mentioned about the importance of AI in future and also regarding the jobs in those fields. He ended his session with a Quote by NASA on AI.

The workshop concluded by expressing a vote of thanks to the guests and students to for their time and making the workshop successful . Special thanks was for **Mr. Nehal Tembhurkar** who is a **software developer** at Brilllect and was an **Alumni of Dr. Ambedkar College** who also helped to arrange this workshop for his juniors. The Workshop was of great success. It helped students to know about something new and prepare themselves for their bright futures. The Lecture came to an end with the students getting a deep knowledge about the emerging technologies and their application.

Screenshots of the Workshop in Chronological order:



Arshad Shareef is presenting

Ritika Borkar and 60 more

10:06 AM

Cloud Technology

Brillect
Empowering Professionals

Activate Windows
Go to Settings to activate Windows.
29-May-21 14

Dhananjay Bansod
Brillect Tech Solutions
Pooja Madan
Astha Pandit
Suhani Jaiswal
Nikita Gadge
Shubham Gupta
Makmd Kedar
Arshad Shareef

Arshad Shareef is presenting

Shivani Gohane and 59 more

9:57 AM

Computer Science/IT
Machine Learning
Math and Statistics
Data Science
Software Development
Traditional Research
Domains/Business Knowledge
Knowledge

Brillect
Empowering Professionals

Activate Windows
Go to Settings to activate Windows.
29-May-21 8

Dhananjay Bansod
Brillect Tech Solutions
Astha Pandit
Nikita Gadge
Suhani Jaiswal
Shubham dubey
Shubham Gupta
Makmd Kedar
Arshad Shareef

Meeting details ^

Turn on captions

Arshad Shareef is presenting

Arshad Shareef is presenting

Divya Kawale and 62 more

10:04 AM

BIG DATA
ANALYTICS
DECISIONS

Brillect
Empowering Professionals

Activate Windows
Go to Settings to activate Windows.

Dhananjay Bansod
Brillect Tech Solutions
Pooja Madan
Astha Pandit
Suhani Jaiswal
Shubham dubey
Shubham Gupta
Makmd Kedar
Arshad Shareef

Meeting details ^

Turn on captions


Arshad Shareef is presenting

Arshad Shareef is presenting

Rashmi Tiwari and 63 more

10:11 AM

How these Technologies work Behind the screen?



- Using Cloud to Store Data
- Using AI and ML to suggest friends and location
- Using Data Science to showcase advertising and analyze the users data.
- Using Cyber Security to protect the Databases

Brillect

Arshad Shareef


Participants: Dhananjay Bansod, Pooja Madan, Suhani Jaiswal, Shubham Gupta, Brillect Tech Solutions, Astha Pandit, Nikita Gadge, Makmd Kedar

Arshad Shareef is presenting

Bhuvneshwari Ma... and 62 more

10:15 AM

Our Plans



- Collaborations**
Microsoft Azure
EC Council
NASSCOM
- Give Away**
Training Certificate
Internship Certificate
Global Certificate
- Future Planning**

Brillect


Arshad Shareef

Participants: Dhananjay Bansod, Pooja Madan, Suhani Jaiswal, Shubham Gupta, Brillect Tech Solutions, Astha Pandit, Nikita Gadge, Makmd Kedar

Meeting details

Turn on captions

Arshad Shareef is presenting



WE ARE FOCUSING ON ENCOURAGING BRILLIANCE AND EMBRACING INTELLECT

THANK YOU!

7758985363

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www.brillect.in

Brillect

Arshad Shareef

Participants: Pooja Madan, Suhani Jaiswal, Shubham Gupta, Astha Pandit, Dr. Pankaj Nimbalkar, Makmd Kedar

https://meet.google.com/lbw-oywv-zah

Kalpesh Pimpalekar is presenting

trunal weghekar and 59 more

10:19 AM

Introduction: Machine Learning

Brillect

"Field of study that gives computers the capability to learn without being explicitly programmed"

5/29/2021

Brillect@2021

3

Meeting details

Turn on captions

Kalpesh Pimpalekar is presenting

Participants: Ruchika Shegaonkar, Kalpesh Pimpalekar, Makmd Kedar, Dr. Pankaj Nimbalkar, Shubham Gupta, Sagar Saywankar, Pooja Madan, Shradha Thakur, Nehal Tembhurkar

Kalpesh Pimpalekar is presenting

Shalini Yadav and 61 more

10:22 AM

Need for Machine Learning

Brillect

"To make decisions, based on data, with efficiency and scale"

- ✓ Lack of Human Expertise
- ✓ Decision Making Scenarios
- ✓ Creation of Models for Analyzing and Processing huge amounts of Data
- ✓ Business Automation

5/29/2021

Brillect@2021

4

Meeting details

Turn on captions

Kalpesh Pimpalekar is presenting

Participants: Sambodhi Barsagade, Kalpesh Pimpalekar, Makmd Kedar, Dr. Pankaj Nimbalkar, Shubham Gupta, Sagar Saywankar, Pooja Madan, Shradha Thakur, Nehal Tembhurkar

Kalpesh Pimpalekar is presenting

Prajakta Wadhvi and 61 more

10:26 AM

How Machine Learning works?

Brillect

- ✓ Data Collection
- ✓ Data Processing
- ✓ Data Training
- ✓ Building Models
- ✓ Testing
- ✓ Prediction

Learning Phase

Inference from Model

5/29/2021

Brillect@2021

6

Meeting details

Turn on captions

Kalpesh Pimpalekar is presenting

Participants: Sambodhi Barsagade, Kalpesh Pimpalekar, Makmd Kedar, Dr. Pankaj Nimbalkar, Shubham Gupta, Sagar Saywankar, Pooja Madan, Shradha Thakur, Nehal Tembhurkar

https://meet.google.com/bw-oyvw-zah

Kalpesh Pimpalekar is presenting

Machine Learning Types

5/29/2021

Brillect@2021

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Brillect

Meeting details

Turn on captions

Kalpesh Pimpalekar is presenting

https://meet.google.com/bw-oyvw-zah

Kalpesh Pimpalekar is presenting

Meleeha Shoeb and 60 more

Meeting details

Turn on captions (6)

Kalpesh Pimpalekar is presenting

https://meet.google.com/bw-oyvw-zah

Kalpesh Pimpalekar is presenting

Pratik S. Borghate and 60 more

Case Study

Aim: Creation of a Simple Artificial Neural Network (ANN)

ANN Components:

- ✓ An input layer that receives data and pass it on
- ✓ A hidden layer
- ✓ An output layer
- ✓ Weights between the layers
- ✓ A deliberate activation function for every hidden layer (Sigmoid Function)

5/29/2021

Brillect@2021

10

Brillect

Meeting details

Turn on captions (6)

Kalpesh Pimpalekar is presenting

https://meet.google.com/lbw-oyvw-zah

Kalpesh Pimpalekar is presenting

```

10 print("Beginning Randomly Generated Weights:")
11 print(neural_network.synaptic_weights)
12
13 # training data consisting of 4 examples - 3 input values and 1 output
14 training_inputs = np.array([[0, 0, 1],
15                            [1, 0, 1],
16                            [0, 1, 1]])
17
18 training_outputs = np.array([[0, 1, 0]])
19
20 # training taking place
21 neural_network.train(training_inputs, training_outputs, 10000)
22
23 print("Ending Weights After Training:")
24 print(neural_network.synaptic_weights)
25
26 user_input_one = str(input("User Input One: "))
27 # name of the file
  
```

```

C:\Users\MAJESH\AppData\Local\Programs\Python\Python39\python.exe "D:/Brillect Projects/Workshop/pythonProject10/cs2.py"
Beginning Randomly Generated Weights:
[[[-0.16594599]
 [ 0.48648099]
 [ 0.99972121]]
 [[0.68748094]
 [-0.28049364]
 [ 0.87376353]]]
Ending Weights After Training:
[[[-0.68748094]
 [ 0.28049364]
 [ 0.87376353]]]
User Input One:
  
```

Meeting details

Turn on captions

Kalpesh Pimpalekar is presenting

Kalpesh Pimpalekar is presenting

Future Jobs in AI & ML

- ✓ Computational Philosopher
- ✓ Robot Personality Designer
- ✓ Robot Obedience Trainer
- ✓ Autonomous Vehicle Infrastructure Designer
- ✓ Algorithm Trainers / Click Workers
- ✓ AI Cybersecurity Expert

Meeting details

Turn on captions

Kalpesh Pimpalekar is presenting

https://meet.google.com/lbw-oyvw-zah

Kalpesh Pimpalekar is presenting

Salaries of Machine Learning Engineers

| Freshers / Entry Level | Machine Learning Engineer | 501,058 INR |
|------------------------|---------------------------|---------------|
| Intermediate level | Machine Learning Engineer | 11,42,000 INR |
| Expert level | Machine Learning Engineer | 19,99,619 INR |

Based on Location's in India

Meeting details

Turn on captions

Kalpesh Pimpalekar is presenting