

Dayananda Sagar College of Arts, Science and Commerce
Department of Computer Applications-MCA

Webinar on “Machine Learning and Deep Learning” on 22nd Jan 2021



Photo 1.Introduction to Machine Learning in association with Imarticus Learning



Photo 2: Introduction to Data Science Concepts

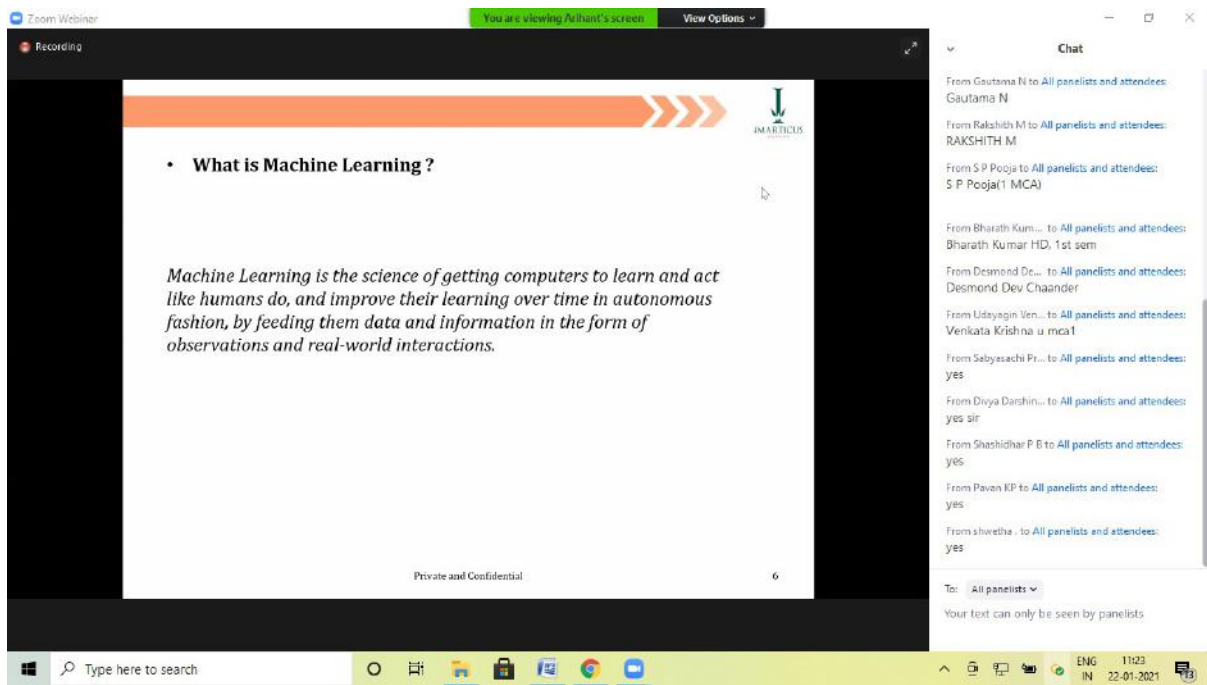


Photo 3: Machine Learning Importance and its features

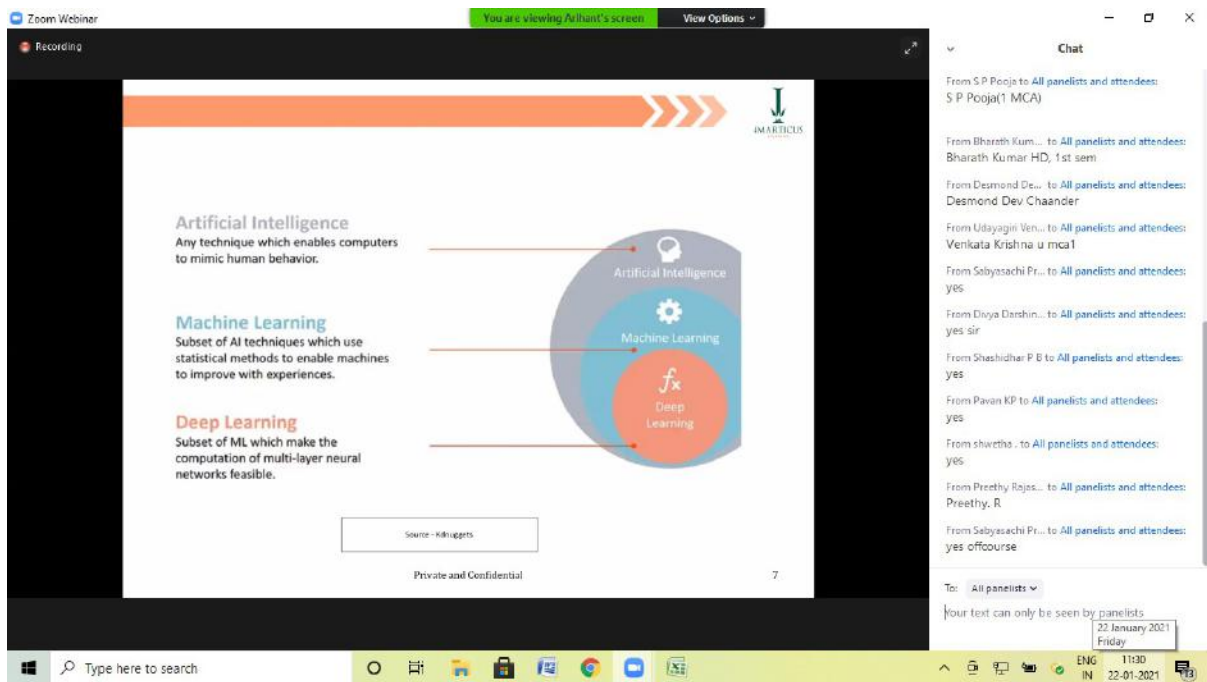


Photo 4: A picture that shows the subsets of AI

Zoom Webinar | You are viewing Adhith's screen | View Options

Recording

Different Types of Learning

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graph LR
    ML[MACHINE LEARNING] --> UL[UNSUPERVISED LEARNING  
Group and interpret data based only on input data]
    ML --> SL[SUPERVISED LEARNING  
Develop predictive model based on both input and output data]
    UL --> C[CLUSTERING]
    SL --> CL[CLASSIFICATION]
    SL --> R[REGRESSION]
  
```

Private and Confidential

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Chat

From S.P.Pooja to All panelists and attendees: S P Pooja(1 MCA)

From Bharath Kum... to All panelists and attendees: Bharath Kumar HD, 1st sem

From Desmond De... to All panelists and attendees: Desmond Dev Chaander

From Udayagin Ven... to All panelists and attendees: Venkata Krishna u mca 1

From Sabiyasachi Pr... to All panelists and attendees: yes

From Divya Darshin... to All panelists and attendees: yes sir

From Shashidhar P B to All panelists and attendees: yes

From Pavan KP to All panelists and attendees: yes

From shwetha . to All panelists and attendees: yes

From Preethy Rajas... to All panelists and attendees: Preethy, R

From Sabiyasachi Pr... to All panelists and attendees: yes offcourse

To: All panelists

Your text can only be seen by panelists

ENG 11:32
IN 22-01-2021

Photo 5: Another picture that shows different types of Learning

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Recording

Why ML?

Connected devices and availability of data
Billion

~2008: More connected devices than people

Improved algorithms and training methods
Error rate, %

Year	Image recognition (Human)	Image recognition (Computer)	Speech recognition (Human)	Speech recognition (Computer)
2010	26	5	27	5
2013	11	5	20	5
2015	5	<5	5	<5

Exponential improvement of computing power
Number of calculations/second per \$1,000

2050: All human brains
2023: 1 human brain
2010: 1 mouse brain
2001: 1 insect brain

Exponentially faster, smaller, cheaper, and better

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Chat

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From Divya Darshin... to All panelists and attendees: yes sir

To: All panelists

Your text can only be seen by panelists

ENG 11:37
IN 22-01-2021

Photo 6: A glimpse of importance of Machine Learning

Zoom Webinar | You are viewing Arjun's screen | View Options

Recording

Who is Data Scientist ?

WHO AM I?
I am a part analyst & part artist. I use my analytical and technical abilities to extract meaning / insights from massive data sets.

WHAT DO I DO?
1. I cleanse existing raw data & build models to predict future data.
2. I go beyond merely collecting and reporting data, to look at data from multiple angles & give meaning to it.
3. I identify the correct business problem(s) & offer solutions (via visualizations, reports or blogs) by best applying the data.

WHAT DO I RELY ON?
1. Analytics
2. Predictive Models
3. Statistical Analysis & Modeling
4. Data Mining
5. Sentiment Analysis
6. What-if Analysis

THE PROCESS I FOLLOW
Define Problem → Structure Data → Use Programming Language

WHAT DO I EARN?
After oil & gas geologists, mine is the 2nd highest paid job in the world.
\$ 100,000 to 150,000

HOW DO I HELP ORGANIZATIONS TODAY?

• Increase data accuracy	• Reduce costs
• Develop strategies	• Mitigate risks
• Improve operational efficiency	• Offer personalized products/services

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Chat

yes

From Divya Darshin... to All panelists and attendees: yes sir

From Shashidhar P B to All panelists and attendees: yes

From Pavan KP to All panelists and attendees: yes

From shwetha . to All panelists and attendees: yes

From Preethy Rajas... to All panelists and attendees: Preethy, R

From Sabayasachi Pr... to All panelists and attendees: yes offcourse

From Divya Darshin... to All panelists and attendees: yes sir

From Sabayasachi Pr... to All panelists and attendees: yes

From shwetha . to All panelists and attendees: yes

From Desmond De... to All panelists and attendees: yes sir

From Devaraj Patil to All panelists and attendees: Devaraj

To: All panelists

Your text can only be seen by panelists

Zoom Meeting | Type here to search | ENG IN | 11:44 | 22-01-2021

Photo 8: Role of a Data Scientist

Zoom Webinar | You are viewing Arjun's screen | View Options

Recording

Data Scientist Demand Across Industries

INDUSTRIES WITH HIGH DEMAND FOR DATA SCIENTISTS

41% of data scientists work in technology	6% work in financial services
13% work in marketing	4% work in government
11% work in a corporate setting	4% work in academia
9% work in consulting	4% work in retail and consumer packaged goods
7% work in health care/pharmaceuticals	2% work in gaming

Private and Confidential | 10

Chat

venikata krishna u mca i

From Sabayasachi Pr... to All panelists and attendees: yes

From Divya Darshin... to All panelists and attendees: yes sir

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From Pavan KP to All panelists and attendees: yes

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From Sabayasachi Pr... to All panelists and attendees: yes

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From Desmond De... to All panelists and attendees: yes sir

To: All panelists

Your text can only be seen by panelists

Zoom Meeting | Type here to search | ENG IN | 11:41 | 22-01-2021

Photo 9: Importance of Data Scientist and its demand.

The slide displays a process flow for Data Analytics. It consists of four overlapping circles in a horizontal sequence: Data Collection (red), Data Formatting (green), Data Analytics (purple), and Data Visualization (blue). The slide is part of a presentation by SMARTICS, with a footer indicating 'Private and Confidential' and slide number '13'. A chat window on the right shows messages from various attendees.

Photo 10: The work flow of Data Analytics

The slide is titled 'Data Science Use Case Across Industries' and focuses on 'The applications of Big Data (Network Architecture) for organisations and businesses'. It features a matrix with three levels of application (Front-end, Middle-end, Back-end) and three network types (Machine to Machine, Human to Machine, Human to Human). The matrix is summarized by the text 'The Network: from the Machine to the Human Interactions'. The slide is marked 'Private and Confidential' and is slide number '14'. A chat window on the right shows messages from attendees.

Level	Machine to Machine	Human to Machine	Human to Human
Front-end: Usage of the information	Monitoring: control, home automation, security	Wearable technologies: virtual or augmented reality	Social networks: Facebook, Twitter, Amazon, etc.
Middle-end: Optimisation of the existing solutions	Process: Smart Cities, default and failure detection, etc.	Improvement of the operations: customer (marketing), sport or health, etc.	Targeting: Marketing, Risk, Fraud, etc.
Back-end: Conception of new solutions	Edge analysis: energy consumption, etc.	Behavior Analysis (genetic, body indicators, etc.)	Emerging trends: detection via text-mining

Photo 11: The Data Science Use Case across Industries

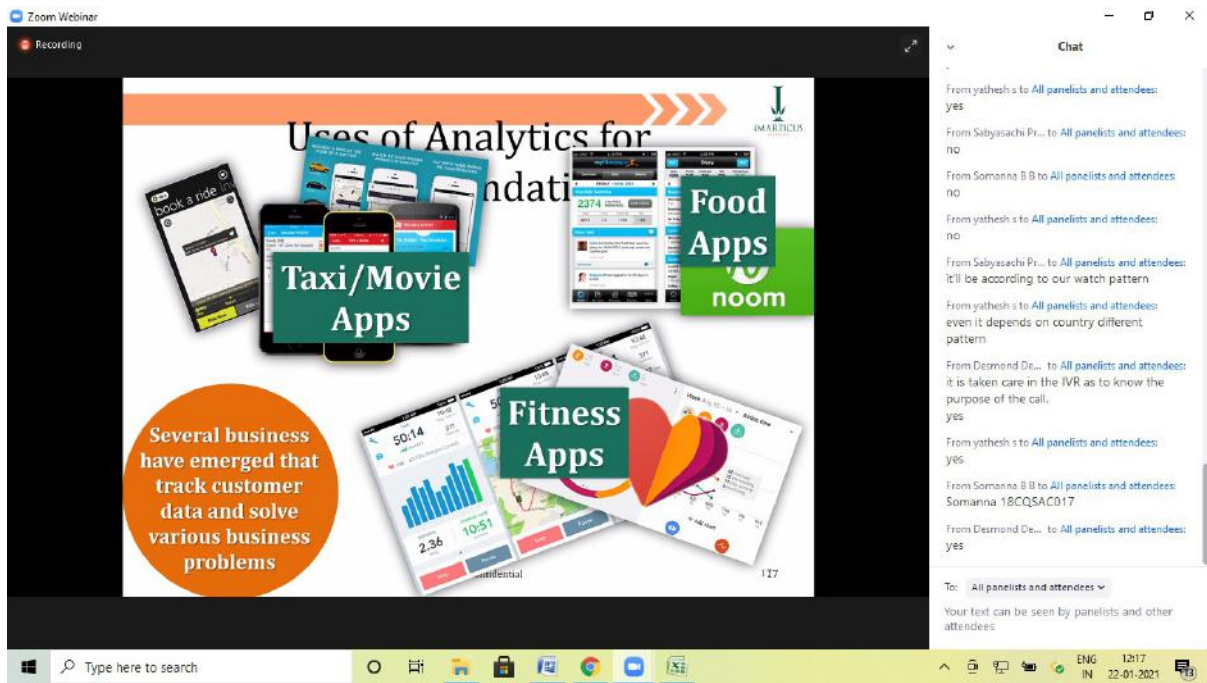


Photo 12: Use of Data Analytics

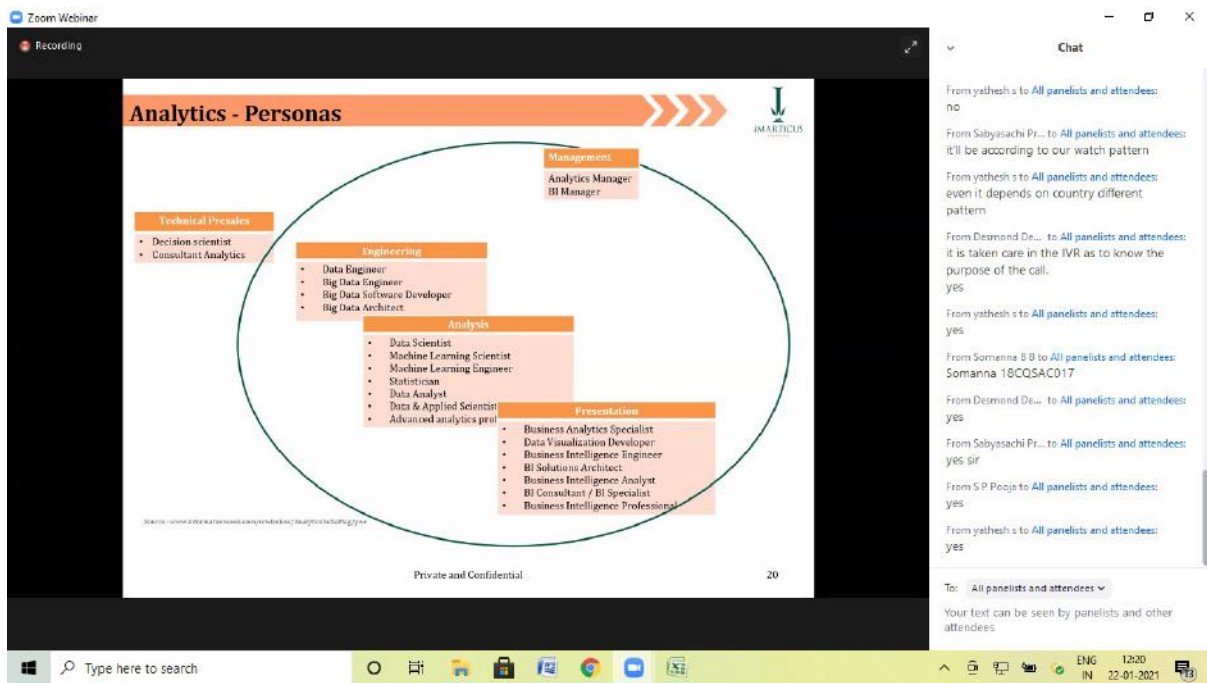


Photo 14: A picture that shows the different type of People who involved in Analytics.