



SAL COLLEGE OF ENGINEERING

&

**SAL INSTITUTE OF TECHNOLOGY & ENGINEERING
RESEARCH**

Department of Information Technology

Awareness Program

On

**“Innovative Applications of ML in Social Media
Domain”**

21st February, 2022.

Director: - Dr. Rupesh Vasani

Principal: - Dr. Bhavna Soni

Head of Department: - Prof. Vijaysinh Jadeja

Session Conducted by: - Asst. Prof. Alpa K. Oza

Department of Information Technology,

SAL Education, Ahmedabad



Date: 21/02/2022

Venue: SAL College of Engineering & SAL Institute of technology & Engineering Research

Mode of Workshop: Online – Zoom

Title of Workshop: Innovative Applications of ML in Social Media Domain

Name of speaker: Asst. Prof. Alpa K. Oza

No. of students Participated: 70

No. of faculties Participated: 15

No. of external Participated (if any): Nil

Objective:

To make the Students aware about the various Innovative Applications of ML in Social Media

Social media platforms have become an integral part of day-to-day life for a majority of the world's internet users. People tend to get more erudition from social media. Apart from information, people can create content for social media to showcase their skills. An example is the video resume, which professionals create and publish on social media to show their presence. Content can take different forms such as images, text, emoticons, and videos.

Benefits in Terms of Learning, Skills & Knowledge:

Since there are not many limits on content creation on social media, users generate a massive amount of data that shows all the characteristics of big data. This data can be used for different analytical and predictive applications for business. Selling data through APIs for business and educational purposes is also a business for many data giants. Structural Query Language is not sufficient to mine information from big data. It needs complex statistical and machine learning (ML) approaches to glean information from this massive data. The chapter provides a survey of different metaheuristic machine learning algorithms used for various interesting research problems in the domain of social networks and big data.

About the Event:

The Department of Information Technology of SAL College of Engineering & SAL Institute of Technology & Engineering Research has organized an Awareness Program on “**Innovative Applications of ML in Social Media Domain**” for the students. This workshop was organized so that students can understand, how machine learning helps social media and promotes business.

Highlights of the Workshop:

The workshop started with the brief Introduction of Institution's Innovation Council, given by event coordinator **Asst. Prof. Aarti Parekh**. 'MHRD's Innovation Cell (MIC)' is to encourage, inspire young students by supporting them to work with new ideas while they are in their formative years. MIC has envisioned creation of 'Institution's Innovation Council (IICs) across selected HEIs. Foundation and journey of IIC in Sal Education since June 2020 was explained.

Thereby event was conducted by **Asst. Prof. Alpa K. Oza** on “Innovative Applications of ML in Social Media Domain” Machine Learning is important because it gives enterprises a view of trends in customer behavior and business operational patterns, as well as supports the development of new products. Many of today's leading companies, such as Facebook, Google and Uber, make machine learning a central part of their operations. These social media platforms allows machines to decide which advertisements are to be shown to which audience. They collect data from users, analyze it, find out their preferences and accordingly show advertisements which hold their interest. A series of algorithms that enable computers to identify patterns in data and classify it in clusters. This is perfectly adapted to unstructured data as social media postings don't follow any rules. It is usually a mix of text, images, sounds, and video.

This event offered an edge to e-learning over classroom teaching by ensuring that the students learn effectively with the varied formats of content in an interactive, engaging, and techie manner. Machine learning lets you scale your social media analysis to any amount of data - that could mean trillions of posts! And yet you can still easily keep up with consumer opinions and trends.

The screenshot shows a Zoom meeting interface. At the top, there are three video thumbnails for participants: Bhupendra Patel (Host), Mitesh Suthar, and Alpa Oza (highlighted). Below the thumbnails, a presentation slide is displayed with the title "What is ML?" and the text: "Machine learning (ML) is the study of computer algorithms that can improve automatically through experience and by the use of data." On the right side, a list of 67 participants is visible, including names like Alpa Oza, Aayush Patel, and Anshish Parmar. The bottom of the screen shows the Windows taskbar with various application icons and the system tray displaying the time as 11:44 on 21-02-2022.

Zoom Meeting | You are viewing Alpa Oza's screen | View Options

Recording... | Meet Savani | Meet Savani | Alpa Oza | Heet SHAH | 20_6550 - JINENDRA G...

Data Generated by Social Media

4 Vs - Volume, Velocity, Variety, and Veracity

2,329,560,397	2,216,886	262,448,841
Google searches today	Blog posts written today	Tweets sent today
2,440,017,105	28,438,875	47,833,206
Videos viewed today on YouTube	Photos uploaded today on Instagram	Tumblr posts today

Unmute | Start Video | Security | Participants (66) | Polls | Share Screen | Reactions | Apps | More | End

Participants (66)

Find a participant

- Bhupendra Patel (Host, me)
- Alpa Oza
- Alpa Oza
- 191130107066
- 20_510_TC5_Rushika Panchal
- 20_6550 - JINENDRA GUNDIG...
- Aayush Patel
- Aditya Nagar
- ankit panchal
- Ansh's iPhone
- Arya
- Ashish Parmar

Invite | Mute All

ENG IN | 11:47 | 21-02-2022

Zoom Meeting | You are viewing Alpa Oza's screen | View Options

Recording... | Meet Savani | Meet Savani | Alpa Oza | Heet SHAH | 20_6550 - JINENDRA G...

Recommender System based on Social Media Data

- A **recommender system**, or a **recommendation system** (sometimes replacing 'system' with a synonym such as platform or engine), is a subclass of information filtering system that seeks to predict the "rating" or "preference" a user would give to an item.
- Eg. Last.fm and Pandora Radio

Unmute | Start Video | Security | Participants (72) | Polls | Share Screen | Reactions | Apps | More | End

Participants (72)

Find a participant

- Bhupendra Patel (Host, me)
- Alpa Oza
- Alpa Oza
- 19_25_SAS Nen Patel

Invite | Mute All

Chat

nayan patel to Everyone

ok

Who can see your messages? Recording On

To: Everyone | Type message here...

ENG IN | 11:52 | 21-02-2022

Zoom Meeting

Meet Savani

Recording...

Participants (70)

Find a participant

- AO Alpa Oza
- 1N 19_25_SAS Nen Patel
- 191130107066
- R 20_510_TCS_Rushika Panchal
- 20_6550 - JINENDRA GUNDIG...
- AP ankit panchal
- AI Ansh's iPhone
- A Arya
- AP Ashish... [Ask to Unmute](#) [More >](#)
- A Ayush
- B Binali

Chat

ENG IN 11:55 21-02-2022

Zoom Meeting

Dhruv patel

nayan patel

Recording...

Hybrid recommender systems

The Netflix Prize One of the events that energized research in recommender systems was the Netflix Prize. From 2006 to 2009, Netflix sponsored a competition, offering a grand prize of \$1,000,000 to the team that could take an offered dataset of over 100 million movie ratings and return recommendations that were 10% more accurate than those offered by the company's existing recommender system. This competition energized the search for new and more accurate algorithms. On 21 September 2009, the grand prize of US\$1,000,000 was given to the BellKor's Pragmatic Chaos team using tiebreaking rules.

Participants (70)

Find a participant

- Bhupendra Patel (Host, me)
- AO Alpa Oza
- AO Alpa Oza
- 1N 19_25_SAS Nen Patel

Chat

ok

TB5_VIRAJ_70 to Everyone

particular interval of time

Who can see your messages? Recording On

To: Everyone

Type message here...

ENG IN 12:02 21-02-2022

Zoom Meeting

Recording...

Mansi Sohagia Dhruv patel

Alpa Oza Heet SHAH

Fake News Identification using Social Media Data

- Gender classification in social media data is an important aspect for law enforcement, target advertising, and other social-related problems.
- Alowibdi et al. (2013) proposed an algorithm for classifying profiles as male and female profiles. The algorithm used five features to classify the gender. The features may be the color of the profile background picture or the set of text used to post the content on social media.
- Li and Xu (2014) introduced a rule-based classification system based on sociology concepts to identify and label emotions in microblog posts.

Participants (62)

Find a participant

Bhupendra Patel (Host, me)

Alpa Oza

Alpa Oza

19_25_SAS Nen Patel

Invite Mute All

Chat

particular interval of time

Prof. Dulari Bhatt to Everyone

yes

Who can see your messages? Recording On

To: Everyone

Type message here...

ENG IN 12:17 21-02-2022

Zoom Meeting

Recording...

Alpa Oza

Fake News Identification using Social Media Data

particular interval of time

Prof. Dulari Bhatt to Everyone

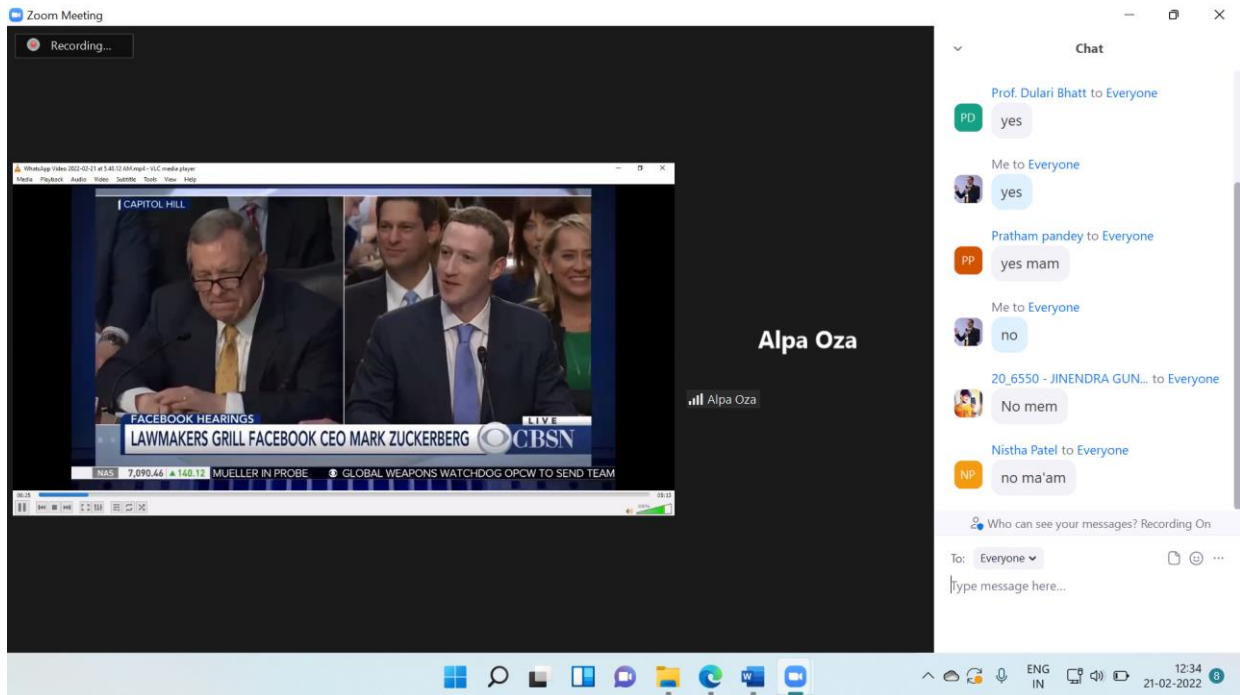
yes

Who can see your messages? Recording On

To: Everyone

Type message here...

ENG IN 12:20 21-02-2022



Total 70+ participants were present in this program including students and Faculty members. Students will have a good impact of this session in their design engineering projects and final year Internship subject as per the curriculum of the University.

Report Prepared By:

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