



Report of the Webinar

on

MACHINE LEARNING FOR EDGE DEVICES

DATE: 11Th MAY 2020

Time:11:00 AM to 12:30 PM

SPEAKER

Dr. Amit Thakkar

Associate Professor

Department of IT CSPIT CHARUSAT



MACHINE LEARNING FOR EDGE DEVICES

A screenshot of a Zoom meeting. The main content is a slide titled "Agenda" with a list of topics:

- Introduction
- Current Era
- Machine Learning Basics
- EDGE Devices and Edge Computing
- EDGE Intelligence and Advantages
- Case Studies using Edge Intelligence
- Edge Intelligence using NVIDIA JETSON Nano
- Conclusion

The slide is displayed in a Zoom window. On the right side, there is a grid of participant video thumbnails. The top thumbnail shows a man in a blue shirt, identified as "Amit Thakkar". Below it, there are several other thumbnails with initials like "IM", "SP", "A", "AP", "AS", "CT", etc.

A screenshot of a Zoom meeting. The main content is a slide titled "A NEW COMPUTING MODEL". The slide is divided into three sections:

- Configure Network**
Turing-Complete
Diagram: A neural network with input nodes x_1, x_2, x_3 and output nodes $f^1(x_1, x_2, x_3)$ and $f^2(x_1, x_2, x_3)$.
- Train Model**
Robust Validation
Diagram: A graph showing a function $f(x)$ plotted against x .
- Runtime Inference**
Onboard Intelligence
Image: A drone flying in the sky.

The slide is displayed in a Zoom window. On the right side, there is a list of participants (56) with search and control icons. The top participant is "Amit Thakkar". Below the list, there is a "Activate Windows" watermark.

Cisco Webex Meetings

Audio Participant Meeting Help

IM SP A AP AT

Iste mbit (Host) Amit Thakkar Shivni Patel aarzubhalodiya1417 Aashruti Prajapati Abhishek Thakkar

Viewing Amit Thakkar's appl...

Edge Intelligence Use Cases : Healthcare

Sensor Network Gateway Internet Cloud Data Centre

Start my video Learning for Edge Devices

kanu_thakor Krishna Patel krishnahant krupa Krutarth

Viewing Amit Thakkar's appl...

INTELLIGENT MACHINES

"Billions of intelligent devices will take advantage of DNNs to provide personalization and localization as they become faster and faster over the next several years."

Life Simplified with Connected Devices

Search

- PC Me
- Iste mbit Host
- Amit Thakkar
- aarzubhalodiya1417
- Aashruti Prajapati
- Abhishek Thakkar
- Anjana Bhanushali
- Archi Soni
- atul kharat
- Bharti nirmal
- Charmy Thacker
- deepa thanki
- Disha Patel

Activate Windows

Glimpses of Webinar

The Online session was conducted by **Dr. Amit Thakkar**, on 11th May, 2020; on the topic of "**Machine Learning for Edge Devices**". Dr. Amit Thakkar is an Associate Professor in Dept of IT CSPIT at CHARUSAT. The session was useful for all semester students. Total 62 students has attended this webinar. This event was initiated by Faculty coordinator Prof.Jayna Donga, ISTE faculty coordinator Prof. Sunayana Domadia and Student Coordinator Ms.Bhumi Kachhiya under the guidance of Prof.Dr.Archana Nanoty(Principal MBIT) and Prof.Nirav Raja(HOD CE Dept.).The CE department of MBIT has organized this webinar under the ISTE student branch MBIT.

Key points to remember from this session

- **What is machine learning?**

- Machine learning is the science of getting computers to realise a task without being explicitly programmed.

- **ABCD Promoting Machine Learning**

- Algorithm
- Business
- Chip
- Data

- **Main applications of machine learning.**

- Data mining
- Computer vision
- Natural language processing
- Robotics

- **Future applications of cognitive intelligence.**

- In Agriculture.
 - Farm mechanisation for precision in Agriculture.
- In Healthcare.
 - Diagnostic APIs for personalized treatments.
- In manufacturing.
 - Cobots for edge computing.
- In Automotive.
 - Self-driving cars -- infotainment systems.
- In Social media.
 - Intelligent filters for facial identification.
- In Financial services.
 - Innovative payment methods to be safe from frauds.

- **Edge intelligence can be used for.**

- Smart cities.
- Industrial automation.
- Healthcare.

Student Feedbacks:

1) Best engaging session, opening new perspective of career opportunities.

**--Krutarth Trivedi
Student at MBIT**

2) It was a very good session. We get lots of information.

**--Heli Patel
Student at MBIT**

3) It was very informative session about the different Edge devices and how Machine learning is used with them!

--Ankita Panjwani
Student at MBIT