

DAILY ASSESSMENT FORMAT

Date:	13-07-2020	Name:	Poorvi j
Course:	coursera	USN:	4AL17EC083
Topic:	Mathematics for machine learning:Linear Algebra	Semester & Section:	6th sem 'B' sec
Github Repository:	Poorvi-2000		

FORENOON SESSION DETAILS

Coursera for Students | Coursera | Introduction: Solving data science challenges with mathematics

coursera.org/learn/linear-algebra-machine-learning/lecture/15F21/introduction-solving-data-science-challenges-with-mathematics

Radhyntha

Mathematics for Machine Learning: Linear Algebra | Week 1 | Introduction: Solving data science challenges with mathematics | Home | Next

Welcome to this course

- Video: Introduction: Solving data science challenges with mathematics 2 min
- Reading: About Imperial College & the team 5 min
- Reading: How to be successful in this course 5 min
- Reading: Grading policy 5 min
- Reading: Additional readings & helpful references 10 min
- Discussion Prompt: Nice to meet you! 15 min
- Complete our short pre-

Introduction: Solving data science challenges with mathematics

Dr David Dye
Professor of Metallurgy

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English

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Notes

All notes

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Image of session

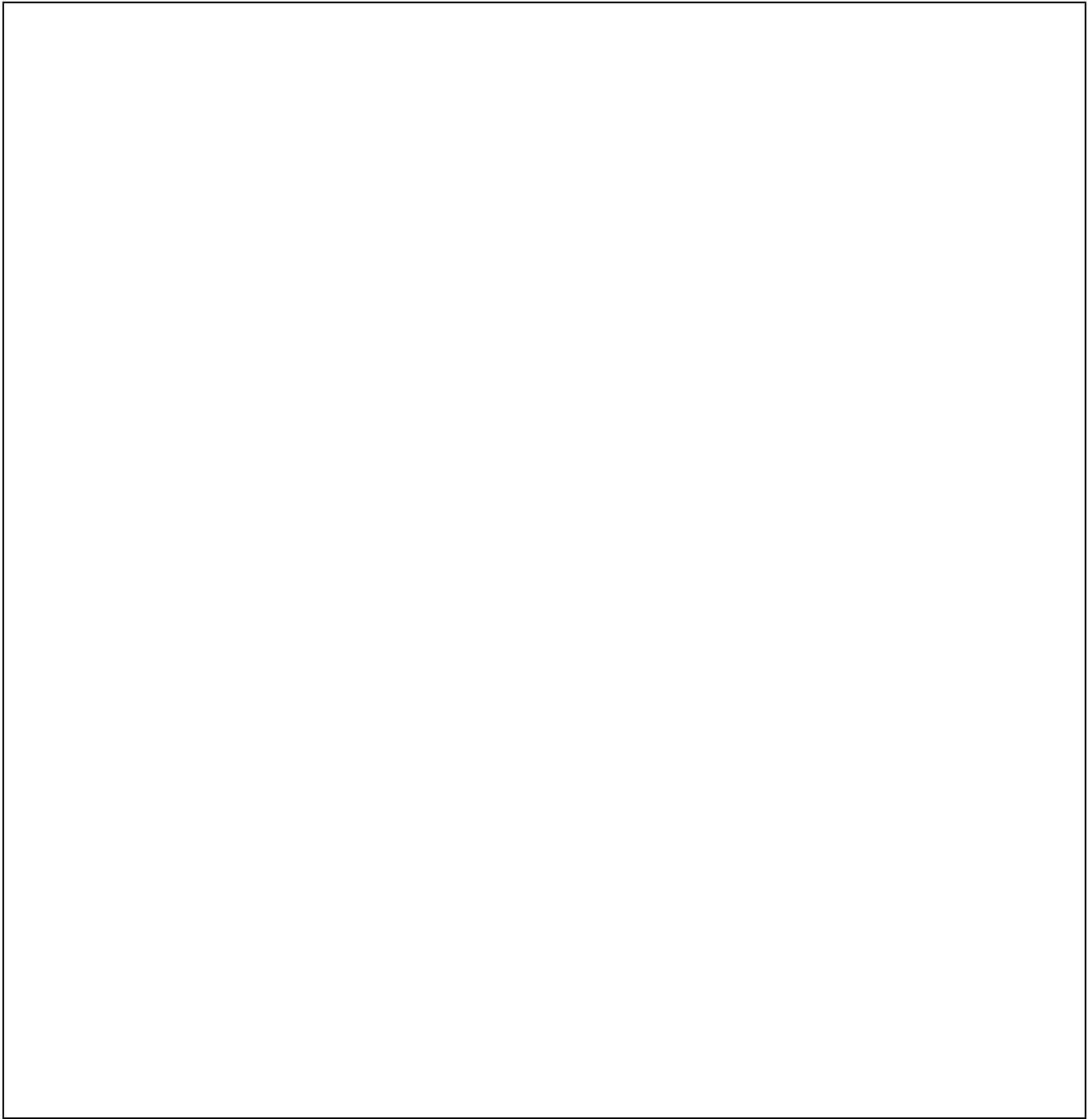



Figure: A diagram illustrating the relationship between the variables x and y . The horizontal axis is labeled x and the vertical axis is labeled y . The diagram shows a series of points connected by lines, forming a path that starts at the origin and moves towards the upper right corner. The path is composed of several segments, each representing a different value of x and y .

00 Coursera for Students | Coursera x 00 Doing some vector operations | x +

← → ↻ coursera.org/learn/linear-algebra-machine-learning/quiz/152wX/doing-some-vector-operations

coursera  Rashmiha

Mathematics for Machine Learning: Linear Algebra | Week 1 | Doing some vector operations [Prev](#) | [Next](#)

Welcome to this course

The relationship between machine learning, linear algebra, and vectors and matrices

Vectors

- ✓ Video: Operations with vectors 11 min
- ✓ Practice Quiz: Doing some vector operations 7 questions

Summary

PRACTICE QUIZ • 30 MIN

Doing some vector operations

✓ Submit your assignment [Try again](#)

✓ Receive grade TO PASS: 80% or higher

Grade 100% [View feedback](#)
We keep your highest score


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<https://www.coursera.org/learn/linear-algebra-machine-learning/lecture/Pd6N7/operations-with-vectors>

Windows taskbar: 16:52 13-07-2020

00 Coursera for Students | Coursera x 00 Operations with vectors - 3h x +

← → ↻ coursera.org/learn/linear-algebra-machine-learning/lecture/Pd6N7/operations-with-vectors

coursera  Rashmiha

Mathematics for Machine Learning: Linear Algebra | Week 1 | Operations with vectors [Prev](#) | [Next](#)

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Operations with vectors



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Windows taskbar: 16:52 13-07-2020

Machine learning is the latest in a long line of attempts to distill human knowledge and reasoning into a form that is suitable for constructing machines and engineering automated systems. As machine learning becomes more ubiquitous and its software packages become easier to use, it is natural and desirable that the low-level technical details are abstracted away and hidden from the practitioner. However, this brings with it the danger that a practitioner becomes unaware of the design decisions and, hence, the limits of machine learning algorithms. The enthusiastic practitioner who is interested to learn more about the magic behind successful machine learning algorithms currently faces a daunting set of pre-requisite knowledge: Programming languages and data analysis tools Large-scale computation and the associated frameworks Mathematics and statistics and how machine learning builds on it At universities, introductory courses on machine learning tend to spend early parts of the course covering some of these pre-requisites. For historical reasons, courses in machine learning tend to be taught in the computer science department, where students are often trained in the first two areas of knowledge, but not so much in mathematics and statistics. Current machine learning textbooks primarily focus on machine learning algorithms and methodologies and assume that the reader is competent in mathematics and statistics. Therefore, these books only spend one or two chapters of background mathematics, either at the beginning of the book or as appendices. We have found many people who want to delve into the foundations of basic machine learning methods who struggle with the mathematical knowledge required to read a machine learning textbook. Having taught undergraduate and graduate courses at universities, we find that the gap between high school mathematics and the mathematics level required to read a standard machine learning textbook is too big for many people. This book brings the mathematical foundations of basic machine learning concepts to the fore and collects the information in a single place so that this skills gap is narrowed or even closed.

Linear algebra is a sub-field of mathematics concerned with vectors, matrices, and linear transforms. It is a key foundation to the field of machine learning, from notations used to describe the operation of algorithms to the implementation of algorithms in code. In this course on Linear Algebra we look at what linear algebra is and how it relates to vectors and matrices. Then we look through what vectors and matrices are and how to work with them, including the knotty problem of eigenvalues and eigenvectors, and how to use these to solve problems. Finally we look at how to use these to do fun things with datasets - like how to rotate images of faces and how to extract eigenvectors to look at how the Pagerank algorithm works.

Since we're aiming at data-driven applications, we'll be implementing some of these ideas in code, not just on pencil and paper. Towards the end of the course, you'll write code blocks and encounter Jupyter notebooks in Python, but don't worry, these will be quite short, focussed on the concepts, and will guide you through if you've not coded before. At the end of this course you will have an intuitive understanding of vectors and matrices that will help you bridge the gap into linear algebra problems, and how to apply these concepts to machine learning.

You are viewing tanya menon's screen. View Options

Module-1

- With a neat diagram, explain the architecture of ARM cortex M3 micro-controller. (10 Marks)
 - Explain the register organization of Cortex M3. (06 Marks)

OR

- Explain the operation modes and privilege levels available in ARM cortex M3 with a neat transition diagram. (06 Marks)
 - Mention the instructions used for accessing the special registers. Explain the same using suitable examples. (04 Marks)
 - Explain the stack operations using Push and Pop instructions in ARM Cortex M3. (06 Marks)

July 2018

Module-1

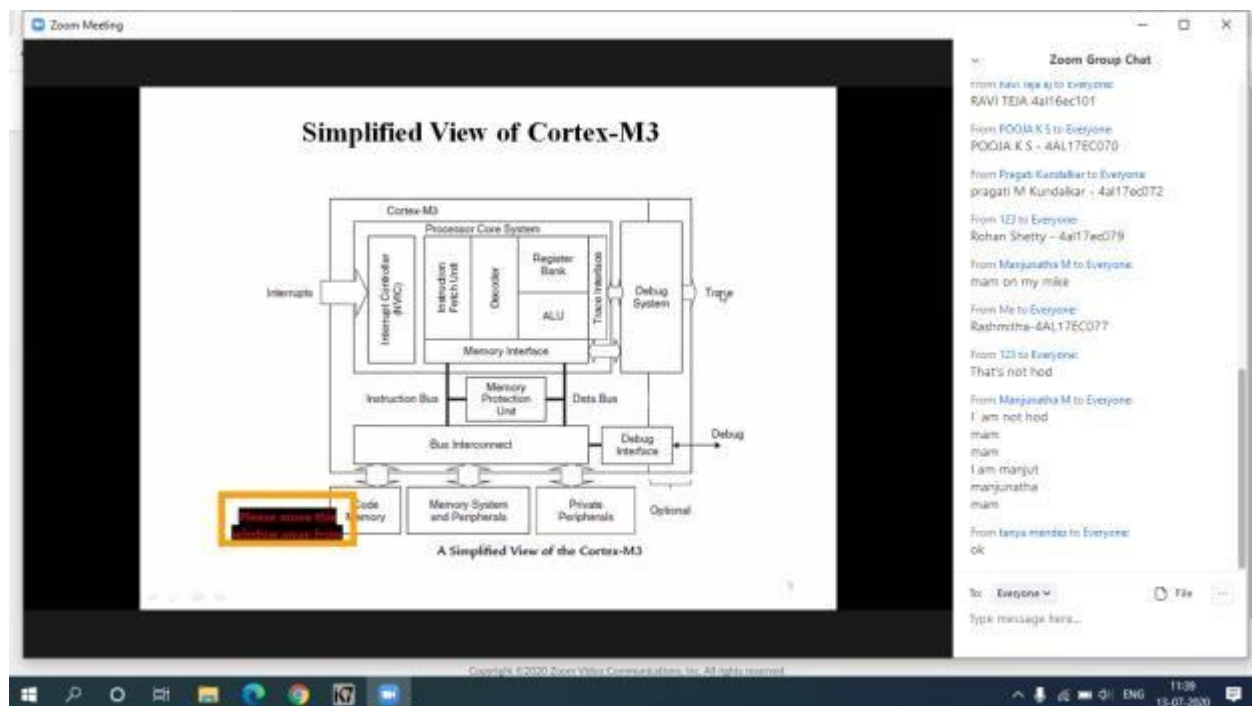
- Explain the architecture of ARM cortex – M3 processor with neat diagram. (08 Marks)
 - With neat diagram, explain operation mode and privilege levels in cortex M3. (08 Marks)

OR

- What is stack? Explain push and pop operation. With the help of a neat diagram. (07 Marks)
 - Explain in detail special registers used in ARM cortex M3 processor. (09 Marks)

July 2019

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Simplified view of cortex M3:

- Hardward architecture
- 32 bit architecture
- NVIC
- Memory protection unit
- R0-R12: general purpose register
- R13:stack pointer
- Program counter is used to hold the next instruction to be executed

- Special registers:
 1. program status registers
 2. interrupt mask registers
 3. control status register

Feature of NVIC:

1. Nested interrupt support
2. Vectored interrupt support
3. Dynamic priority changes support
4. Reduction of interrupt latency
5. Interrupt masking

Application :

1. Consumer product
2. Automotive parts
3. Real time system
4. Data communication
5. Industrial control

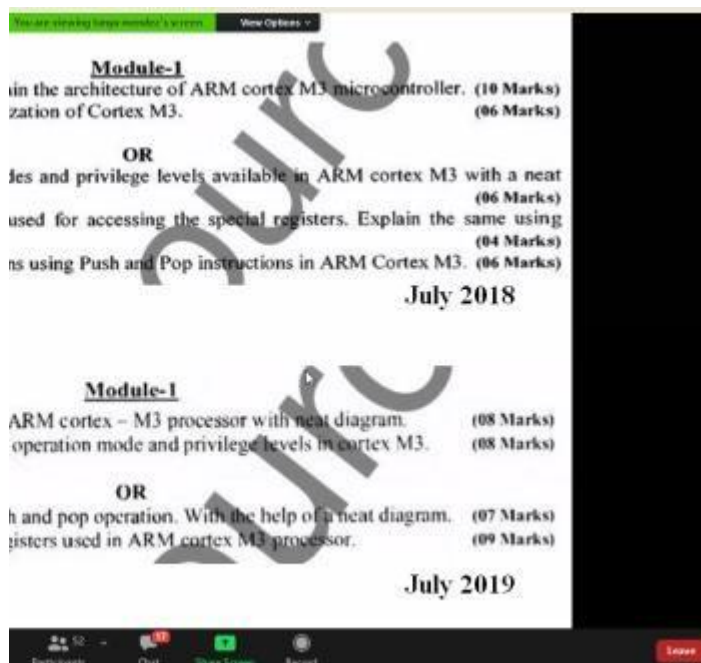
DAILY ASSESSMENT FORMAT

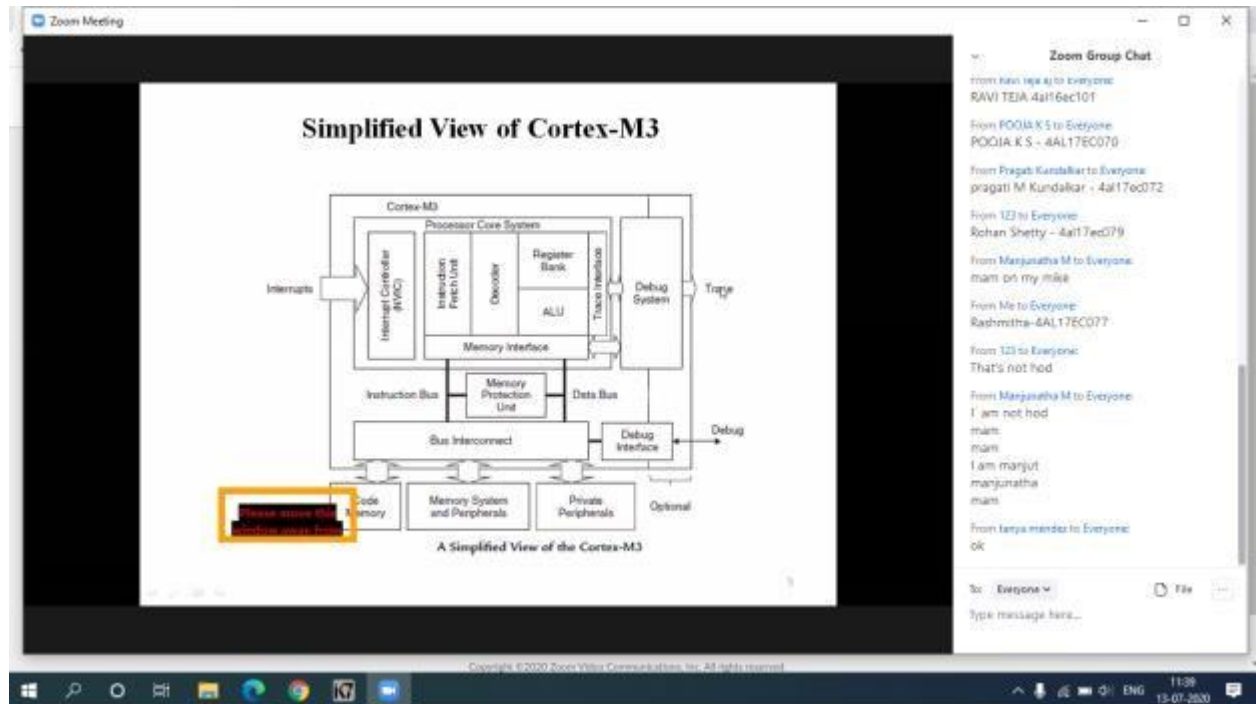
Date:	13-07-2020	Name:	Poorvi j
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AFTERNOON SESSION DETAILS

image of session





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Feature of NVIC:

6. Nested interrupt support
7. Vectored interrupt support
8. Dynamic priority changes support
9. Reduction of interrupt latency
10. Interrupt masking

Application :

6. Consumer product
7. Automotive parts
8. Real time system

9. Data communication

10. Industrial control

Webinar on “DRONE INDUSTRY INSIGHTS”:

DRONE APPLICATIONS

- DISASTER AND HAZMAT MONITORING.
- EMERGENCY DELIVERY (MEDICINE, EQUIPMENT SUPPLIES).
- EMERGENCY RESPONSE COORDINATION.
- DISASTER RELIEF & POST DISASTER ASSESSMENT.
- SEARCH AND RESCUE.
- CRIME SCENE INVESTIGATION.
- CRIMINAL SURVEILLANCE AND TRACKING.
- POLICE RESPONSE COORDINATION.
- SECURITY SURVEILLANCE.
- CROWD CONTROL.
- CHEMICAL AND BIOLOGICAL MONITORING IN AGRICULTURE. (IRRIGATION, PESTICIDES, TREATMENTS).
- FLOOD AND FIRE DETECTION MONITORING.
- INVENTORY AND RECORDS.
- PEST AND DISEASE DETECTION AND ITS TREATMENT.
- PRECISION AGRICULTURE OPERATIONS AND MANAGEMENT.
- ENVIRONMENTAL HAZARD ASSESSMENT.
- ENVIRONMENTAL IMPACT ASSESSMENT AND COMPLIANCE.

JMA
REDEFINING FLIGHT

Webinar interface showing participants: rashmithe, Leo Peter Charles Maria, Vedanth, and 4gm18ec052_Mi...

DRONE COMPANIES IN INDIA

AUS

DYNAMIC TECHNOLOGIES LIMITED

Asteria Aerospace

FLOTANOMERS
CONSTRUCTED BY SPACE FOR

HELL
INFRATECH

INDRON
AERO SYSTEMS

newspace

Throttle Aerospace Systems Pvt Ltd
not a revolution

Garuda UAV

ideaForge
Create. Inspire

JMA
REDEFINING FLIGHT

Webinar interface showing participants: rashmithe, Leo Peter Charles Maria, Srinivas T B, and Thirishala M

Zoom Meeting (Locked)

rashmitha Deepak Raj Srinivas T B Mohan Babu dg



Leo Peter Charles Managing Director - JMA

Zoom Group Chat

u comment on claims which I raise on trending issues of DRONE PRATHAP
Can battery-operated drone cover over 400 km?
Can drones be used to distribute food during flood reliefs?
Does building 600 drones require huge amount of time?
Can we build drone using all e waste?

From sarthak kumar to Everyone:
could u please tell me more about our drone
am

From Mahitajay Hulla to Everyone:
to complete drone course class

From Ramman Ajay Kumar to Everyone:
interested to join with you or how can I?

From MN Suckth to Everyone:
what are the exact job opportunities for mechanical engineers in drone field

From Deepak Raj to Everyone:
https://bit.ly/4T7_Wetmard_Feedback
Feedback link


To: Everyone
Type message here...

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14:08 13-07-2020

Zoom Meeting (Locked)

rashmitha Deepak Raj Srinivas T B Mohan Babu dg



Leo Peter Charles Managing Director - JMA

Zoom Group Chat

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From MN Suckth to Everyone:
what are the exact job opportunities for mechanical engineers in drone field

From Deepak Raj to Everyone:
https://bit.ly/4T7_Wetmard_Feedback
Feedback link
https://bit.ly/4T7_Wetmard_Feedback

To: Everyone
Type message here...

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14:08 13-07-2020

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY, MOODBIDRI.
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGG.



Certificate

OF PARTICIPATION

THIS IS TO CERTIFY THAT

Poorvi hj

from Alvas institution of engineering technology has
participated in the webinar on "**DRONE INDUSTRY INSIGHTS**"
held on **13 JULY 2020** as part of the webinar series on "**Future
Ahead for Electronics Engineers**"

A handwritten signature in black ink, likely belonging to Mr. Leo Peter Charles.

Mr. Leo Peter Charles
Managing Director
Jane Aerospace Pvt Ltd

A handwritten signature in black ink, likely belonging to Dr. D V Manjunatha.

Dr. D V Manjunatha
Professor and Head
Dept. of ECE, AIET

A handwritten signature in black ink, likely belonging to Dr. Peter Fernandes.

Dr. Peter Fernandes
Principal
AIET

