



RV INSTITUTE OF TECHNOLOGY AND MANAGEMENT®

(Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi)
Chaitanya Layout, JP Nagar 8th Phase, Kothanur, Bengaluru-560076

Department of Computer Science and Engineering & Information Science and Engineering

FDP on “Importance of Data Science in Machine Learning”

6th to 10th February 2023

1) FDP – Brochure

The brochure is a purple-themed flyer for a Five Day Online Faculty Development Programme. It features the RV Institute of Technology and Management logo and name, along with affiliations to Visvesvaraya Technological University and AICTE. The title of the FDP is 'Importance of Data Science in Machine Learning and its Applications', running from Feb 6th to 10th, 2023. The brochure lists the Chief Patrons (Dr. M. P. Shyam, Dr. (h.c) A.V.S. Murthy, Sri. D.P. Nagaraj, Sri. K.G. Subbarama Setty), the Patron (Dr. Jayapal R), the Convener (Dr. Malini M. Patil, Dr. Latha C A), Programme Coordinators (Dr. Surbhi Agrawal, Dr. Niharika P Kumar), and the Organizing Committee (Prof. V R Srividhya, Prof. Deepak D. J, Ms. Chaitra H R, Mr. Abhishek V). It also lists Resource Persons (Mr. Vivek Chaudhary, Mr. Abhijeet Joshi, Mr. Deepak Nagar, Dr. Snehanshu Saha, Dr. Nitin Nagaraj, Dr. Malini M. Patil, Mr. Soma Dhavala, Dr. Gowri Srinivasa, Dr. A. Srinivas, Mr. Anmol Agrawal) and the registration fee (Academicians and Students: Rs 250/-, Industry delegates: Rs 500/-). A photo of a person using VR is shown in the bottom right corner.

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Organized by
Department of
Computer Science and Engineering
&
Information Science and Engineering

**IMPORTANCE OF DATA
SCIENCE IN MACHINE
LEARNING AND ITS
APPLICATIONS**

Five Day
Online Faculty Development
Programme

6th Feb
2023 to 10th Feb
2023

CHIEF PATRONS
Dr. M. P. Shyam
President, RSST
Dr. (h.c) A.V.S. Murthy
Hon. Secretary, RSST
Sri. D.P. Nagaraj
Hon. Joint Secretary, RSST
Sri. K.G. Subbarama Setty
Hon. Treasurer, RSST

PATRON
Dr. Jayapal R
Principal, RVITM

CONVENER
Dr. Malini M. Patil
Professor & HoD, CSE
Dr. Latha C A
Professor & HoD, ISE

PROGRAMME COORDINATORS
Dr. Surbhi Agrawal
Associate Professor, CSE
Dr. Niharika P Kumar
Associate Professor, ISE

ORGANIZING COMMITTEE
Prof. V R Srividhya
Assistant Professor, CSE
Prof. Deepak D. J
Assistant Professor, ISE
Ms. Chaitra H R
Programmer
Mr. Abhishek V
Lab In-charge

RESOURCE PERSONS
Mr. Vivek Chaudhary
Data Science & ML Research Fellow, AlmaBetter
Mr. Abhijeet Joshi
Technology Professional, Siemens, Bengaluru
Mr. Deepak Nagar
Technology Professional, Siemens, Bengaluru
Dr. Snehanshu Saha
Associate Professor, BITS Pilani
Dr. Nitin Nagaraj
Associate Professor, NIAS, Bangalore
Dr. Malini M. Patil
Professor & HoD, Dept. of CSE, RVITM
Mr. Soma Dhavala
Principal ML Engineer, Wadhvani AI
Dr. Gowri Srinivasa
Professor, PES University
Dr. A. Srinivas
Professor & HoD, Data Science, RNSIT, Bengaluru
Mr. Anmol Agrawal
Data Science Manager, Symphony RetailAI.

Registration Fee
Academicians and Students: Rs 250/-
Industry delegates: Rs 500/-
E-Certificates will be issued to those participants who attend all the sessions.

RV Institute of Technology and Management, Bangalore
Department of Computer Science & Engineering
And Information Science & Engineering

Five Day Online FDP on
IMPORTANCE OF DATA SCIENCE IN MACHINE LEARNING AND IT'S APPLICATIONS
6th February 2023 to 10th February 2023

Registration Details
To register click here
<https://forms.gle/dFQIRAAyne4PyPJW8>

Payment Details are provided in above mentioned link.

Payment can be made through UPI ID. Kindly avoid using the same phone number / UPI ID for multiple payments
*Payments are inclusive of GST

Address For Communication
fdp.rvitm@rvei.edu.in



ABOUT RSST

Managed by Rashtrveeya Sikshana Samithi Trust (RSST). RV Educational Institutions envision promoting innovative learning, instill a spirit of enquiry, inducing healthy challenges, encouraging sustainable accomplishments and ensuring enriching rewards to all students, parents, teachers and associates. RSST believes that every individual from each stratum of society needs the education to fulfill their aspirations. Following this belief, Sri. M. C. Sivananda Sarma, a renowned freedom fighter, educator, and administrator laid the foundation of RV Educational Institutions in the year 1940. Today, RV has become one of India's largest educational consortium with 20 institutions and more than 20,000 students. To realize the vision of creating an atmosphere of involved learning, RSST successfully established one of its most ambitious projects, RV Institute of Technology and Management (RVITM) in 2019.

ABOUT RVITM

RV Institute of Technology and Management (RVITM) is a self financing institution established in Bangalore in the year 2019. Building the future of Science and Technology with a singular vision — to prepare students for the world beyond classrooms. To this effect, we offer four undergraduate programs that promote experiential learning through an ICT enabled curriculum and state-of-the-art infrastructure. We back this up with our holistic approach to education that enables our students to be more than engineers — RVITM encourages them to be bold thinkers — challenging the status-quo in everything they strive to do...

ABOUT FDP

This FDP aims to emphasise as to why data science knowledge is a must before applying machine learning models. It also gives hands-on training on methods of data analysis and how data engineering can be performed and applied in machine learning in various domains. As the FDP is a blend of concepts and hands-on training it will offer deeper insight and, hence, will help academicians, students and industry experts in carrying out research and projects. The FDP also aims to create awareness to new challenges and upcoming research options. Significantly, the FDP will also discuss a few new aspects of data engineering. Motivation for the FDP has come from the observation that most of the researchers and others are using machine learning without having the deep knowledge and understanding of data which may take them in wrong direction. This FDP will fill this undesirable gap and provide a fruitful learning experience.



2) Agenda



RV Institute of Technology and Management®		AGENDA		Go, change the world	
INAUGURATION 6th February 2023					
9.30 A.M.	INVOCATION SONG	Mrs. Chaitra H R,CSE			
9.35 A.M.	WELCOME ADDRESS	Dr. Jayapal R., Principal,RVITM			
9.40 A.M.	ABOUT THE FDP	Dr. Latha C A, Head-ISE,RVITM			
9.45 A.M.	VOTE OF THANKS	Prof. Deepak D J, ISE,RVITM			

3) Report with Photos

This FDP has been proposed to have deeper insights about how much understanding of data , it's statistics , it's interpretation is important before we use ML techniques on them.

We had eminent faculties from various Institutes across India. We had a182 participants who attended this FDP from Institutes like VTU-Belagavi, SJCE-Mysore, Acharya Institute-Bangaluru, Canara Engineering College-Mangalore, Sai Vidhya Institute, East Point College of Engineering, ITM Group of Colleges -Gwalior, Presidency University- Bangalore, PES University -Bangalore, BNMIT -Bangalore, CMR University -Bangalore, Nitte Meenakshi-Bangalore, Global Academy Technology-Bangalore, KNS Institute Of Technology-Belahalli, Alliance College of Engineering and Design, Alliance University, , KLS Vdit-Haliyal, Sri Sairam college of Engineering-Bangalore, Ramaiah Institute of Technology-Bangalore, Dayanada Sagar University-Bangalore, NMAM Institute of Technology, Nitte, St.Joseph Engineering College, Mangalore, Institute of Engineering and Management-Kolkata, KSIT-Bangalore, SGBIT-Belagavi, JSSSTU-Mysuru, GMIT-Davanagere, REVA University-Bangalore, RNSIT-Bangalore, Shri Madhwa Vadiraja Institute of Technology and Management-Bantakal,Udupi, DSCE-Bangalore, APS College of Engineering-Bangalore, Velammal Institute Of Technology , Anna University-Chennai, DSATM-Bangalore, JSS academy-Bangalore, BCE, Shravanabelagola, Ambedkar Institute of Technology-Bangalore, Ballari

Institute of Technology and Management-Ballari, T. John Institute of Technology-Bangalore, Coorg Institute of Technology, Rajagiri College of Social Sciences-Kochi, SDMCET-Dharwad, KIT -Tiptur, Ramaiah University of Applied Sciences, Bangalore Institute of Technology-Bangalore and RVITM-Bangalore.

The speakers of all the sessions were welcomed and so were the participants. The speakers were from premier Institutes like BITS, GOA, National Institute of Advanced Studies, Bangalore, RNSIT Bangalore, RVITM, Bangalore. PES University Bangalore, and Industry experts from AlmaBetter Bengaluru, WadhvaniAi, Symphony RetailAi, Siemens Technology. They all have vast and deep knowledge in the area of data science and machine learning in their working domains and hence will introduce. The Schedule is given below.



RV Institute of Technology and Management, Bengaluru

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**Department of Computer Science and Engineering and
Department of Information Science and Engineering**

Five Day Online Faculty Development Program on

IMPORTANCE OF DATASCIENCE IN MACHINE LEARNING AND ITSAPPLICATIONS

6th February 2023 to 10th February 2023

PROGRAM SCHEDULE					
Inauguration function					
Date: 6 th Feb 2023			Timings: 9:30 am to 10:00 am		
Date Day	Session 1		BREAK (12:00 PM – 2:00 PM)	Session 2	
	(10:00 am to 12:00 pm)			(2:00 pm to 4:00 pm)	
06.02.2023 Monday	Exploratory Data Analysis (Hands-On)	Mr. Vivek Chaudhary Data Science & ML, Research Fellow, Alma Better, Bengaluru,	BREAK (12:00 PM – 2:00 PM)	Optimization in Deep Learning (Concepts)	Dr. Snehanshu Saha Associate Professor, BITS Pilani, Goa Campus, Goa
07.02.2023 Tuesday	Self-Organizing Maps (Hands-On)	Dr. Abhijeet Joshi & Mr. Deepak Nagar Technology Professional, Siemens, Bengaluru		Applied Statistics (Hands-On)	Mr. Vivek Chaudhary Data Science & ML, Research Fellow, Alma Better, Bengaluru,
08.02.2023 Wednesday	Mathematical foundations of PCA and ICA with applications to Data Science. (Hands-On)	Dr. Nithin Nagaraj Associate Professor, National Institute of Advanced Studies, Bengaluru		Data Modelling (Hands-On)	Mr. Anmol Agrawal Data Science Manager, Symphony RetailAI, Bengaluru
09.02.2023 Thursday	Conformal Prediction (Concepts)	Dr. Soma Dhavala Director - ML, Wadhvani Institute for AI, Bengaluru		Outlier Mining (With Case Study)	Dr. Malini M. Patil Professor and Head, Dept. of CSE RVITM, Bengaluru
10.02.2023 Friday	Seeing through the black box: feature selection and model interpretation (Hands-On)	Dr. Gowri Srinivasa Professor, PES University, Bengaluru.		Data analytics in Healthcare to predict Cardiovascular Diseases (Concepts)	Dr. A. Srinivas Professor and Head, Data Science RNSIT, Bengaluru

THANK YOU

The FDP concluded with a Valedictory address and feedback was taken from participants for each session as well as overall feedback on the FDP was taken. E-certificates were issued on

completion of Quiz

Snapshots

Recording 0 Online Class26 RVITM is presenting

AGENDA

INAUGURATION
09:30 AM

INVOCATION SONG
09:30 A.M. Mrs. Chaitra H R,CSE

WELCOME ADDRESS
09:35 A.M. Dr. Jayapal R., Principal,RVITM

ABOUT THE FDP
09:40 A.M. Dr. Latha C A, Head,ISE,RVITM

VOTE OF THANKS
09:45 A.M. Prof. Deepak D J, -E,RVITM

Principal RVITM

Sanjay S

sowmya kural

Dr. Latha C A

Dr. Kalyan N

Dr. Vikash Kumar

Srividhya V R

Tej SUMY JOSEPH PESU RR CSE FACULTY has raised a hand Open queue

09:45 | FDP -Importance Of Data Science in Ma...

Recording 6 Gowri Srinivasa is presenting

LIME Results: An example - 1

Gowri Srinivasa

Arun R

Dr. Niharika Pras...

Poornima N

Dr Suma S

Tejaswini n

Shubha B

Prashanth J

Ankita Mandal

75 others

You

In-call messages

Let everyone send messages

Messages are being recorded with the call

Santoshkumar Mahendrakar 10:39
yes

Dhivyash Reddy 11:12
how exactly do we determine the momentum

Sneha S 11:36
Ma'am, nice session, can you please share the ppt after session

Send a message to everyone. Messages are also recorded.

11:47 | FDP -Importance Of Data Science in Machine Learn...

Recording Snehanshu S is presenting

Recap: The beast conquered!

- Theoretical framework for computing an adaptive learning rate; this is also "adaptive" with respect to the data.
- "large" learning rates may not be harmful as once thought; remedy: guarded value of L_2 weight decay.

What did we gain?

- Novel Approximation functions used during forward pass with "little effort in parameter tuning. k.o. OUTCOME: Accuracy beating state-of-the-art
- Loss Function manipulation to devise learning rate formula. OUTCOME: NO Need to "handcraft" lr performance as good as state of the art
- Metric gains: Time to converge, # of iterations to converge, CPU/RAM utilization

A pipeline with SBAF in forward pass + Adaptive lr in GD back-prop: SYMNET. Released v1.0. <https://github.com/sahamach/sym-net>

Snehanshu S

You

Dr. Surbhi Agrwal

Dr Suma S

123 others

15:27 | FDP -Importance Of Data Science in Machine Learn...

4. Feedback

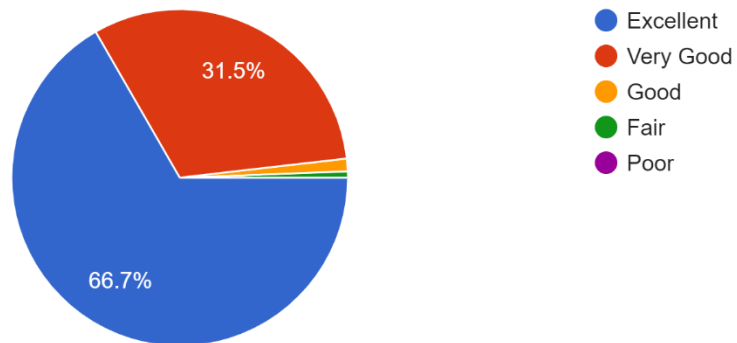
Feedback Link:

https://docs.google.com/forms/d/e/1FAIpQLSc7IeVlevlp6YsCBTdZwO7OMFk6Oqv0z2wG58XSFiw1glsY4w/viewform?usp=sf_link

Number of Participants Responded: 165

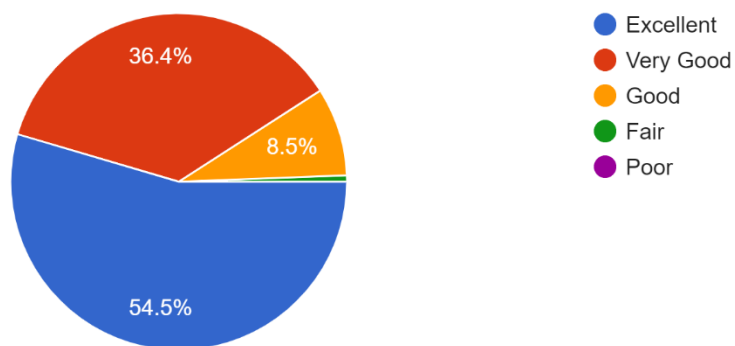
1. Overall how would you rate the FDP?

165 responses



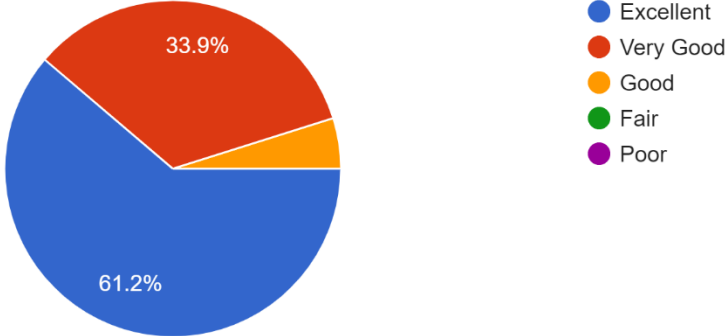
2. Please rate the following aspects of the FDP sessions. A. Did the FDP meet your expectations?

165 responses



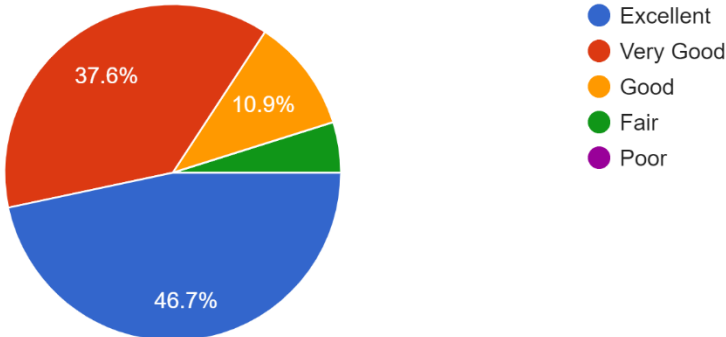
C. How would you rate the overall skills of the trainers?

165 responses



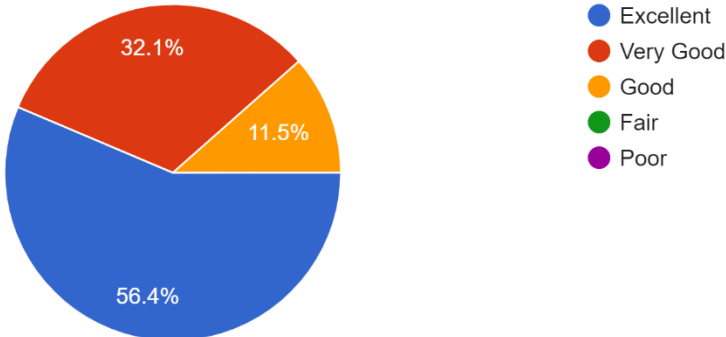
D. Were you able to work on tools discussed in the FDP?

165 responses



E. How would you rate the resource materials provided?

165 responses



5.Attendence Sheet with signature: Excel Sheet Attached

6. Submit hardcopy of Renumeration details/forms: