

SRI VENKATESWARA COLLEGE OF ENGINEERING
DEPARTMENT OF INFORMATION TECHNOLOGY

Online Workshop on

“Foundations of Data Science using Python”

12.02.2024 to 17.02.2024

REPORT

To: HOD-INT
Noted
26
2/13

Submitted to the principal
2/13/24

SRI VENKATESWARA COLLEGE OF ENGINEERING (SVCE)

PENNALUR, SRIPERUMBUDUR-602117



**REPORT OF ONLINE WORKSHOP ON “FOUNDATIONS OF DATA SCIENCE
USING PYTHON”**

Date: 12.02.2024 TO 17.02.2024

Resource person:

External: Mr. Shanthababu Pandian,
AI & Data Architect,
Rolan AI Product Solutions,
London, England,
United Kingdom.

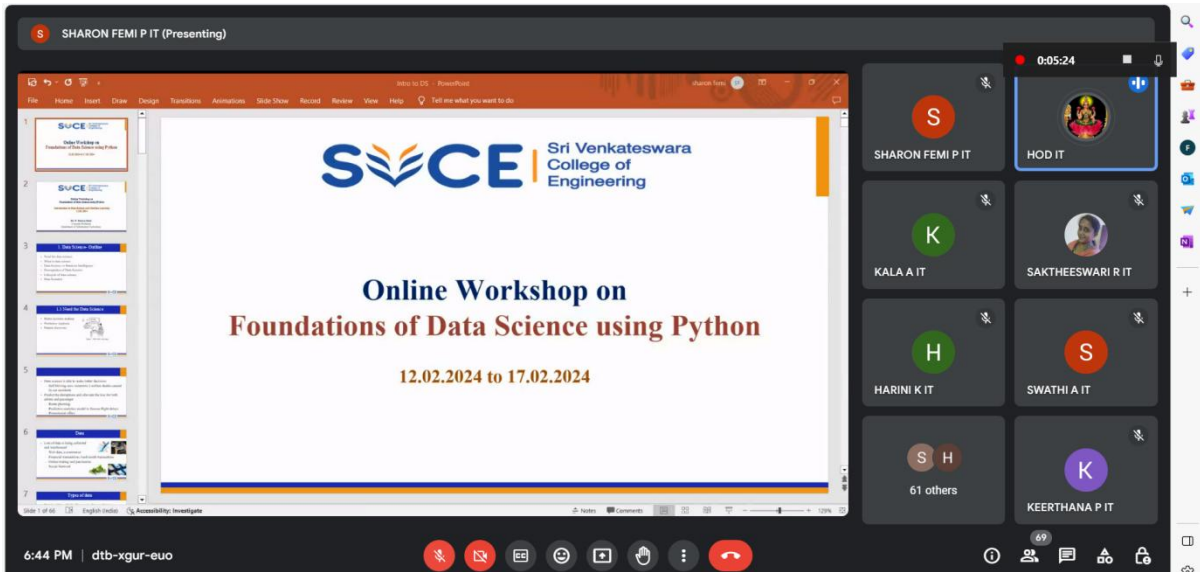
Internal: Dr. A.Kala, ASP/INT
Dr. P. Sharon Femi, ASP/INT
Ms. R. Saktheeswari, AP/INT
Dr.D. Jayanthi, ASP/INT
Dr.K.Kiruthika Devi, ASP/INT

Objectives:

- To provide a clear understanding of Data science and its applications
- To familiarize the basics of Python programming language
- To provide an overview of machine learning concepts and algorithms.

About the programme:

The workshop commenced on February 12, 2024, with an inaugural ceremony featuring a prayer song performed by Ms. Harini Padma, a third-year IT student. This was followed by a welcome address delivered by Ms. R. Saktheeswari, AP/INT. Dr. V. Vidhya, Head of Department/INT, then addressed the participants, emphasizing the significance of Data Science to the students.



Inauguration

Day 1 (12.02.2024)

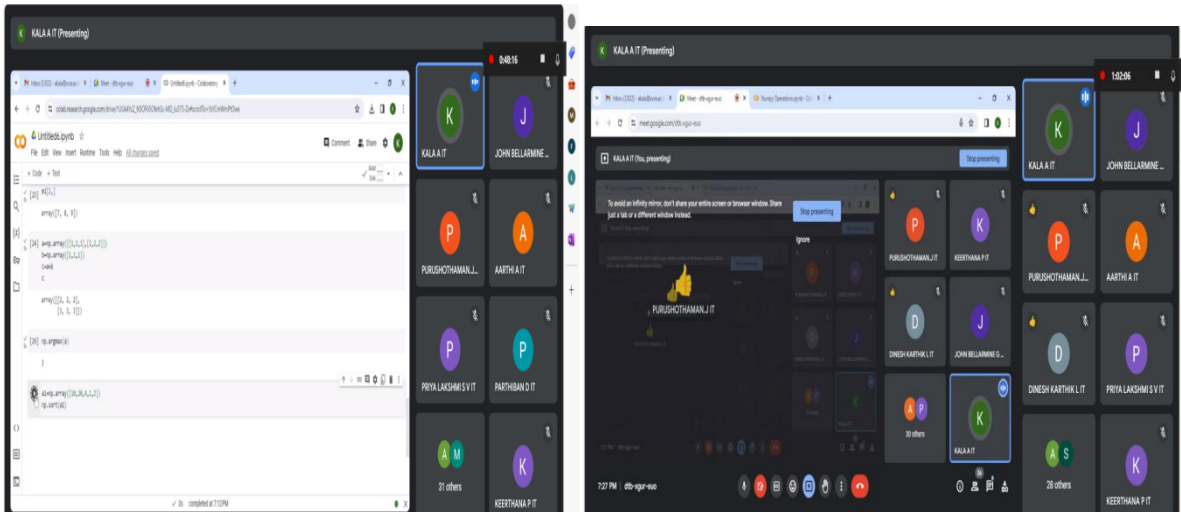
The first session of the workshop started with Dr P.Sharon Femi, providing a concise introduction to Data Science. She elucidated the various types of data and outlined the necessity of Data Science. Additionally, she delved into the different stages comprising the data science lifecycle, offering comprehensive insights. She further clarified the types of Machine Learning algorithms with real-world illustrations.



Session by Dr P.Sharon Femi, ASP/INT .

Day 2 (13.02.2024)

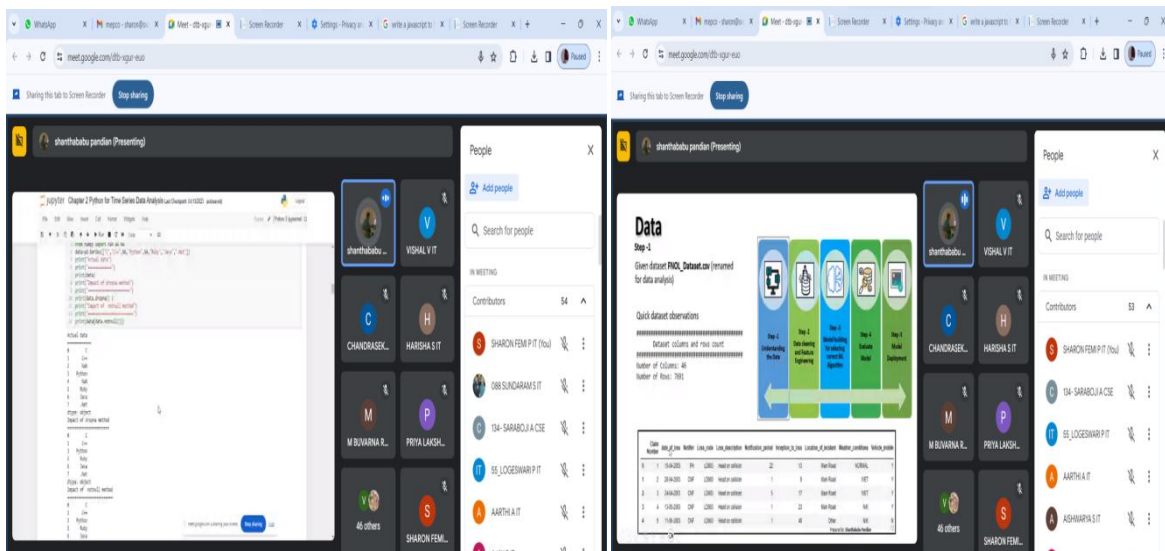
The second session was delivered by Dr.A.Kala, ASP/INT with a focus on Numpy Operations in Python. Throughout this session, she clarified the concepts of numpy packages using real-world examples. Furthermore, students were given a set of problems related to numpy packages for hands-on practice.



Session by Dr.A.Kala, ASP/INT

Day 3 (14.02.2024)

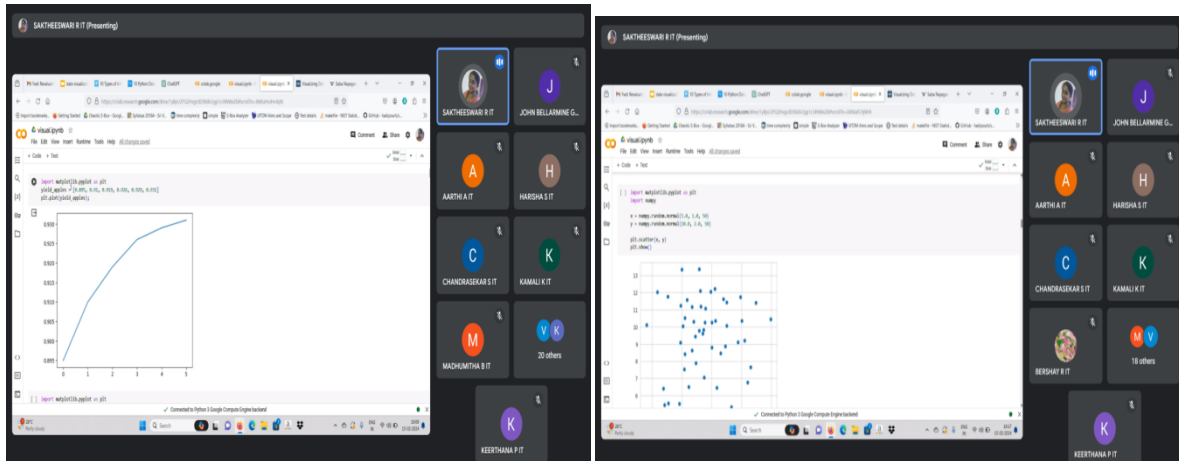
The third session was handled by Mr. Shanthababu Pandian AI & Data Architect, RolanAI Product Solutions, London. He highlighted on the systematic approach involved in extracting insights from data, elaborated on the fundamental concepts of Pandas and guided through various operations for data manipulation. He then demonstrated with code snippets in python for analyzing time series data. Real-world examples were provided to illustrate the practical application of these techniques, allowing participants to gain hands-on experience and a deeper understanding of Pandas. He explained the process of Data Science and motivated students to implement various projects in data science.



Session by Mr. Shanthababu Pandian

Day 4 (15.02.2024)

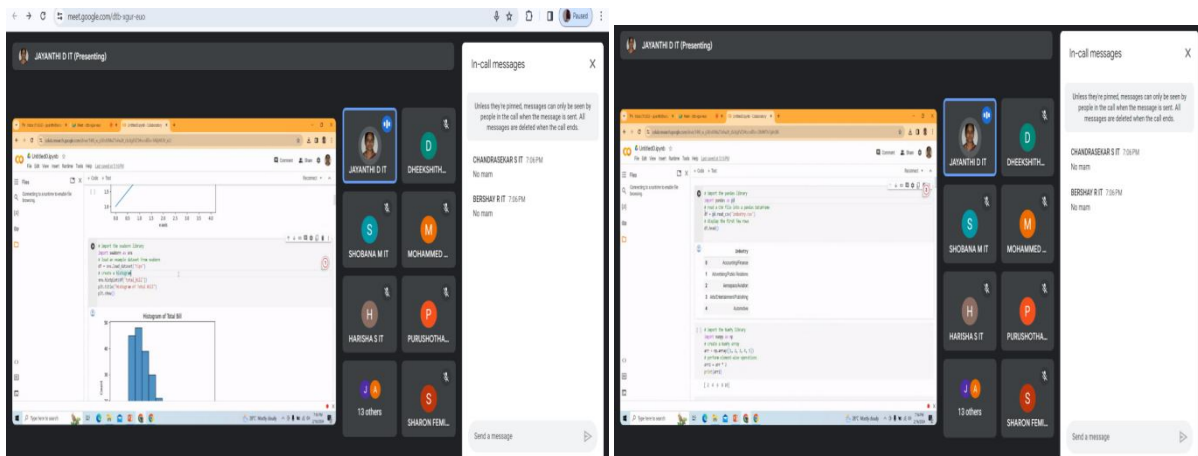
The fourth session of the workshop was conducted by Ms. R.Saktheeswari, AP/INT. She commenced her session by discussing the importance of visualization and imparting knowledge on Data Visualization to the students. She elaborated on the different types of visuals and provided real-time examples for illustration. Subsequently, she delved into the Python libraries for visualization and showcased various graphical representations using Python.



Session by Ms.R.Saktheeswari, AP/INT

Day 5 (16.02.2024)

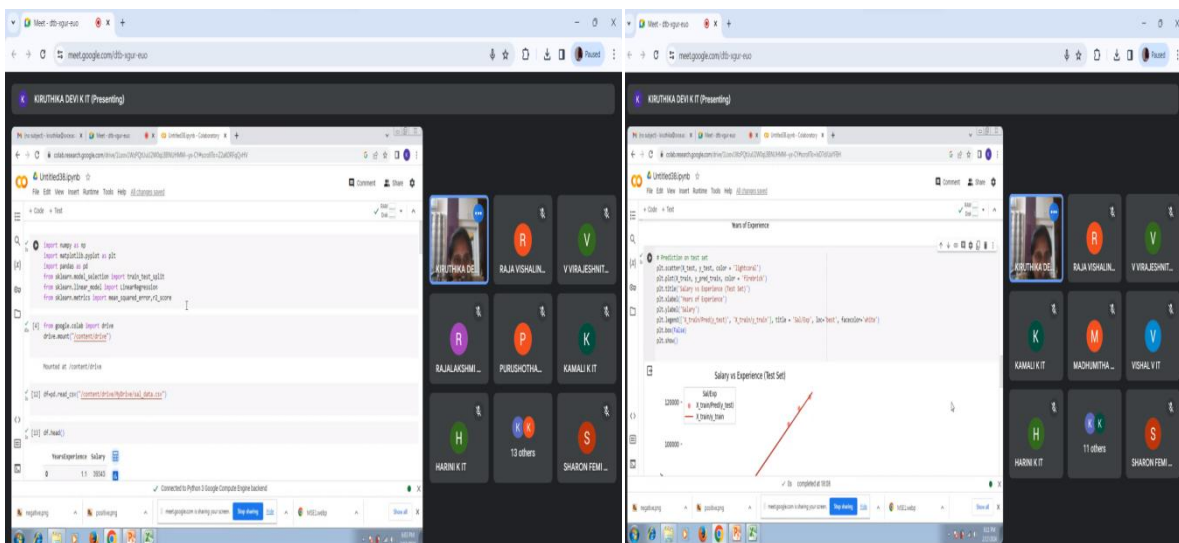
The fifth session of the workshop was conducted by Dr. D. Jayanthi, ASP/INT. She commenced by elucidating the critical role of data cleaning and preprocessing in the data analysis pipeline and highlighted the necessity of preparing datasets adequately before analysis. She also provided an in-depth overview of data preprocessing techniques, illustrating how Python libraries can streamline the process and provided practical demonstrations, showcasing the application of these libraries in real-world scenarios. She delved into the intricate topic of outliers, shedding light on their impact on data analysis and the various methods to detect and handle them.



Session by Dr.D.Jayanthi, ASP/INT

Day 6 (17.02.2024)

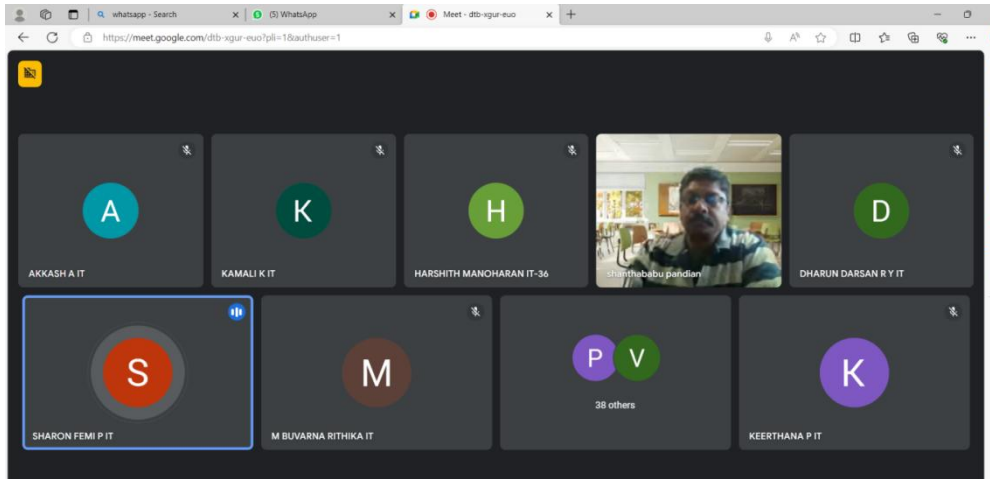
The last session was led by Dr. K. Kiruthika Devi, ASP/INT, focusing on Regression Problems. She initiated her session with a comprehensive introduction to Machine Learning, providing attendees with an overview of its principles. She underscored the importance of regression analysis, emphasizing its relevance in predictive modeling and data-driven decision-making processes. She proceeded with examples of regression and various regression algorithms, elucidating their practical applications using Google Colab in Python, showcasing real-world examples and implementations.



Session by Dr.K.Kiruthika Devi, ASP/INT

Valedictory

The workshop was concluded with a valedictory ceremony on 17th February, 2024 with Mr. Shanthababu Pandian, AI & Data Architect, Rolan AI Product Solutions, London as chief guest. Dr. A. Kala, ASP/INT, extended the welcome address to the attendees. A brief introduction of the chief guest was provided by Keerthana P, a third-year IT student. The chief guest appreciated the sincere efforts of SVCE to come up with such an event and the enthusiastic involvement by the participants. He congratulated all the participants for being active learners and wished them to be experts in Data Science. The participants gave their feedback on the workshop, highlighting its value and relevance to their learning journey. The ceremony concluded with a vote of thanks delivered by Dr. P. Sharon Femi, ASP/INT, expressing gratitude to all involved in making the event a success.



Valedictory of the Workshop

Participant details

Total Number of Participants : 75

Number of Students : 75

Number of First Year Students: 31

Number of Second Year Students: 44

Outcome:

- Gained knowledge on Data Science for various types of problems
- Explored the opportunities and challenges in Data Science & ML using python
- Motivated to build products for real-time case studies using Data Science.
- Imparted knowledge on current trends in Data science and ML.

A. Kala
P. Sharon Femi
R. Saktheeswari
11/3/24
11/3
Workshop Coordinators

Dr. A.Kala, ASP/INT
Dr. P. Sharon Femi, ASP/INT
Ms.R. Saktheeswari, AP/INT

V. Vidhya
11/3/24

HOD/INT

Dr.V.Vidhya

ONLINE WORKSHOP ON "FOUNDATIONS OF DATA SCIENCE USING PYTHON"

12.02.2024 TO 17.02.2024

List of Participants

S.No	Name	Email id	Mobile Number	Register Number	Year	Semester	Section
1	S.Mohammed Faiz	2022it0880@svce.ac.in	9080203072	2127220801051	II	4	A
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60	Sreevardhan B	2022it0492@svce.ac.in	8610829718	2127220801091	II	4	B
61	Madhumitha B	2023it0039@svce.ac.in	9003295185	2127230801052	I	1	A
62	Dineshkarthik L	2023it0797@svce.ac.in	6382294960	2127230801025	I	2	A
63	Shajini A	20230009@svce.ac.in	9488553264	2127230801084	I	1	B
64	Yugan T	2023it0869@svce.ac.in	9943446455	2127230801107	I	2	B
65	Kanish Kumar K	2022it0969svce.ac.in	7339643044	2127220801304	II	4	B
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68	J. Purushothaman	2022it0926@svce.ac.in	9360291556	2127110801303	II	4	B
69	Ramkishore A V	ramkishore1706@gmail.co	9952982610	2127230801077	I	2	B
70	Parthiban	2022it0827@svce.ac.in	7094846945	2127220801058	II	4	A
71	S karthikeyan	2022it0493@svce.ac.in	9150611378	2127220801037	II	4	A
72	Kumaran K.S	2023it0771@svce.ac.in	6383852358	2023it0771	I	1	A
73	SHOBANA M IT	2022it0302@svce.ac.in	7904656675	2127220801084	II	4	B
74	MUBEENA M	2022IT0245@SVCE.AC.IN	8072679405	2127220801053	II	4	A
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d. kalyan 11/3/24
P. Karanth
Coordinator 11/3
R. S. S. S. S.


HoD/INT



SHARON FEMI P IT <sharon@svce.ac.in>

Inaugural invite for the online workshop on "Foundations of Data science using python"

HOD IT <hodit@svce.ac.in>

Mon, Feb 12, 2024 at 6:26 PM

To: Faculty Group <svcefaculty@svce.ac.in>

----- Forwarded message -----

From: SHARON FEMI P IT <sharon@svce.ac.in>

Date: Mon, 12 Feb 2024, 11:38

Subject: Inaugural invite for the online workshop on "Foundations of Data science using python"

To: HOD IT <hodit@svce.ac.in>

Dear madam,
kindly forward to svcefaculty.

Dear Sir/madam,

We cordially invite you all for the inaugural function of the online Workshop on "Foundations of Data Science using Python" from 12.02.2024 to 17.02.2024 organized by the Department of Information Technology.

Date: 12.02.2024

Time: 6.30 PM

Venue: Online (<https://meet.google.com/dtb-xgur-euo>)

The invitation and brochure are attached.

Thanks & Regards,
A.Kala, ASP/INT
P.Sharon Femi, ASP/INT
R.Saktheeswari, AP/INT
Coordinators

2 attachments

Workshop Inauguration.pdf
131K

brochure.pdf
164K

DEPARTMENT OF INFORMATION TECHNOLOGY

ONLINE WORKSHOP ON

“FOUNDATIONS OF DATA SCIENCE USING PYTHON”

Discover topics such as

- Introduction to data science, machine learning
- Numpy operations in python
- Data science process
- Data manipulation with pandas
- Exploratory data analysis
- Data visualization with python
- Data preprocessing
- Classification models
- Regression models

CONVENOR

Dr. V.Vidhya HOD/INT

CO-ORDINATORS

Dr. A.Kala ASP/INT

Dr. P.Sharon Femi ASP/INT

Ms. R.Saktheeswari AP/INT

EVENT DATES

12/02/2024 TO 17/02/2024



SRI VENKATESWARA COLLEGE OF ENGINEERING
Pennalur, Sriperumbudur Taluk - 602117

DEPARTMENT OF INFORMATION TECHNOLOGY

Solicit your esteemed presence for the

Inaugural Function of

Online Workshop

on

Foundations of Data Science using Python

DATE : 12.02.2024

TIME : 6.30 PM

VENUE : Online Mode (<https://meet.google.com/dtb-xgur-euo>)



SRI VENKATESWARA COLLEGE OF ENGINEERING

Pennalur, Sriperumbudur Taluk - 602117

DATE : 12.02.2024

TIME : 6.30 PM

VENUE : Online Mode (<https://meet.google.com/dtb-xgur-euo>)

AGENDA

- Prayer Song
- Welcome address
- Short note by HOD
- Start of session

Coordinators

Dr.A.Kala, ASP/INT

Dr.P.Sharon Femi, ASP/INT

Ms.R.Saktheeswari, AP/INT

Ms. Kala

SRI VENKATESWARA COLLEGE OF ENGINEERING

Department of Information Technology

Ref.: SVCE/IT/Workshop/February 2024

2/02/2024



Submitted to the Principal:

Subject: Requisition of permission to conduct online workshop on "Foundations of Data Science using Python"

It is proposed to conduct online workshop on "Foundations of Data Science using python" for the students by the Department of Information Technology from 12th February to 17th February 2024.

which students?

Objective

- To provide participants with a clear understanding of what data science is and its applications.
- To familiarize participants with the basics of Python programming language.
- To provide a high-level overview of machine learning concepts and algorithms

It is requested that the proposal may be kindly approved.

d. kala 2/2/24
P. Sharon Femi
P. Saktheeswari 2/2
Coordinators

Dr.A.Kala, ASP/INT
Dr.P. Sharon Femi, ASP/INT
Ms.R.Saktheeswari, AP/INT

To: HOD-INT
Approved
2/2
2024

HOD/INT
Dr.V.Vidhya

Target audience

First year & second year

As the 1st & 2nd year students are unaware of Data science the awareness programme/introduction would be for them.

pp do it only for first & second year IT.