



Mahajana Education Society (R.)

Education to Excel

SBRR Mahajana First Grade College (Autonomous)

Jayalakshmpuram, Mysuru - 570 012

Affiliated to University of Mysore

Re-Accredited by NAAC with 'A' Grade, College with Potential for Excellence

**Department of Computer Science & Application
& IQAC**

*Organizes
Interactive Session*

on

**Data Visualization & Regression
In
R Programming**

Resource Person

Dr. Lavanya P.G

Asst. Professor Dept. of Computer Science
Maharani's Science College for womens, Mysuru.

Date: 02.12.2023 Saturday

Time: 11.30 AM

Venue: AVC-III

HoD & Staff
Dept. of Computer Science
& Application

Dr. S R Ramesh
Chief Executive Officer
& Academic Advisor

Dr. B.R. Jayakumari
Principal

Seminar Report on Data Visualization, Regression and R Programming

Date: 02/12/23

SBRR Mahajana First Grade College's **Department of Computer Science and Application**, in collaboration with the Internal Quality Assurance Cell (IQAC), had organized an interactive session under the title '**Seminar on Data Visualization, Regression and R Programming**' on 2nd December 2023 at AVC3 for V Semester BCA Students.

Dr. Lavanya P G, an accomplished scholar with academic credentials including MCA, M.Phil, and Ph.D. in Computer Science from the University of Mysore in November 2021, has left an indelible mark on the field. Her noteworthy contributions encompass the publication of seven research papers, prominently featured in Scopus indexed journals and IEEE. Furthermore, Dr. Lavanya has actively engaged in the global academic discourse, presenting her research findings at four international conferences, demonstrating the depth of her expertise in Computer Science.

The seminar delved into the realm of Data Visualization, emphasizing its significance in decision-making through statistical analysis and charts, especially in the context of the union budget. R's integration of visualization and statistical modeling makes it an ideal environment for tasks ranging from exploratory analysis to advanced predictive modeling. Each step leverages data structures, functions, and packages, demonstrating the synergy between data visualization, regression, and programming skills. Practical insights were provided with a real-life example using college data and graphical representation, illustrating its efficacy in simplifying complex information for diverse audiences. The discussion extended to the role of R programming in data visualization, elucidating its capabilities, statistical applications, and versatility across various fields, underlining its open- source nature and robust community support.

The seminar progressed to explore various data visualization tools, with a focus on the ggplot2 package. She also elucidated the features and benefits. of ggplot2, demonstrating its application through scatter plots, bar plots, and box plots. Real-life examples were employed to illustrate

the relevance of data visualization in detecting financial frauds and the implementation of clustering and box plots in real-world scenarios.

The presentation transitioned to the importance of statistical techniques in data analysis, covering standard deviations, mean, mode, median, and their practical applications. The application of these techniques in market basket analysis, weather prediction, and financial sector analytics highlighted. Descriptive statistics, linear regression, and multiple linear regression were discussed, showcasing their applicability in predicting outcomes, such as salary and real-estate values.

Linear regression is a versatile statistical tool with wide-ranging applications, extending into areas such as marketing. In marketing, businesses often utilize linear regression to analyze the impact of advertising expenditures on sales. By examining historical data on advertising budgets and corresponding sales figures, businesses can model and predict the relationship between these variables. This predictive insight aids marketing teams in optimizing their budget allocation for maximum impact, ensuring efficient resource utilization. Whether it is predicting housing prices, understanding health correlations, or optimizing marketing a crucial analytical tool, strategies, linear regression stands out as facilitating evidence-based decision-making across diverse fields.

She provided participants with a practical understanding of data visualization and regression analysis in R, emphasizing how R programming can streamline data workflows and enhance insights. She shared valuable insights on the significance of model selection and addressed potential errors in data analysis. The seminar concluded with a demonstration of a program predicting Linear regression analysis, emphasizing the practical implementation of statistical techniques.

Q&A Session (10 minutes)

- Open the floor to questions from participants, allowing them to clarify doubts or ask about specific use cases.

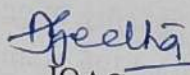
Ms. Archana Asst. Prof, expressed gratitude by thanking Dr. Lavanya and all attendees for their active participation and contributions to the enlightening seminar.


Principal

PRINCIPAL

Smt. Bhagyalakshamma Rattehalli Ramappa
Mahajana First Grade College (Autonomous)

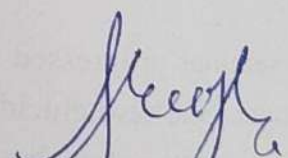
Jayalakshimpuram, MYSURU-570 012


IQAC

IQAC Coordinator

SBRR Mahajana First Grade College
(Autonomous)

Jayalakshimpuram, MYSURU-570 012


HOD and Staff

(87) 1

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Jayalakshmpuram, Mysuru - 570 012

Attendance Sheet

Name of the Committee: BCA with IQAC

Date: 2/12/2023

Name of the Programme: Interactive Session on Data Visualization & Regression in R prog.

Time: 11:30 - 1:30pm

Sl. No.	Name of the Student	Course	Semester	Section	Combination	Signature
1	Gagana.H.D	BCA	V	A	BCA	[Signature]
2	Amitha.R	BCA	V	A	BCA	Amitha
3	Reetu Ray G.R	BCA	V	A		Reetu
4	Pampa B.L	BCA	V	B	-	[Signature]
5	Deekshitha S.N	BCA	V	B	-	[Signature]
6	Kavetha P	BCA	V	A	BCA	Kavetha
7	Lakshitha B.K	BCA	V	A	BCA	Lakshitha
8	Aravitha P	BCA	V	A	BCA	Aravitha
9	Hanini.M	BCA	V	A	BCA	Hanini
10	Lalithya M.L	BCA	V	A	BCA	Lalithya
11	Ganavi M.Y	BCA	V	A	BCA	Ganavi
12	Chandana A.G	BCA	V	A	BCA	Chandana
13	Ashwarya H.N	BCA	V	A	BCA	Ashwarya
14	Shravya L.P	BCA	V	A	BCA	Shravya
15	Sinchoya B.V	BCA	V	A	BCA	Sinchoya
16	Kavyitha N	BCA	V	A	BCA	Kavyitha
17	Bhanu T.A	BCA	V	A	BCA	Bhanu
18	Sheeba Pance	BCA	V	A	BCA	Sheeba
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22		Smt. Binoy Lakshmanappa Ralchelli Ramappa				
23		Mahajana First Grade College (Autonomous)				
24		Jayalakshmpuram, Mysuru-570 012				
25						

Total No. of Students Attended: 18

Signature of the Teacher In charge: [Signature]

Organizing Secretary

Signature

Name: SUNITHA.N
PREETHU.M
REETHU.M

Received
[Signature]
15/12/23

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SBRR Mahajana First Grade College (A)
Jayalakshimpuram, Mysuru - 570 012

Attendance Sheet

Name of the Committee: BCA with IQAC

Date: 2/12/2023

Name of the Programme: Interactive session on Data
Minimization & Regression

Time: 11:30 to 1:30 pm

Sl. No.	Name of the Student	Course	Semester	Section	Combination	Signature
1	Sinchana AM	BCA	V	B	BCA	Sinchana
2	Vaishitha D	- -	- -	- -	- -	Vaishitha
3	Vijayalakshmi K	- -	- -	- -	- -	Vijayalakshmi
4	Rakshitha HB	- -	- -	- -	- -	Rakshitha
5	Sinchana N	- -	- -	- -	- -	Sinchana
6	Kavithara K	- -	- -	- -	- -	Kavithara
7	Shravya NI	- -	- -	- -	- -	Shravya
8	IMPANA J.M	BCA	V	B	BCA	Impana
9	Ashwini K	BCA	V	B	BCA	Ashwini
10	Priyanka KL	BCA	V	B	BCA	Priyanka
11	Shruti B.L	BCA	V	B	-	Shruti
12	Deekshitha S.N	BCA	V	B	-	Deekshitha
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Total No. of Students Attended: 12

Signature of the Teacher In charge:

Organizing Secretary

Signature

Name: SUNITHA.N
PREETHU.M
preethu.m

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Jayalakshmipuram, Mysuru - 570 012

Attendance Sheet

Name of the Committee: BCA with IQAC

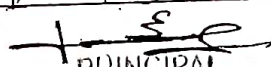
Date: 2/12/2023

Name of the Programme: Interactive Session on Data Visualization & Regression with R programming

Time: 11:30 - 1:30 PM

Sl. No.	Name of the Student	Course	Semester	Section	Combination	Signature
1	YASHWANTH . C	BCA	V	A		Yash
2	U. KARAMCHAND	BCA	V	A		Karam
3	VISHAL SHARMA	BCA	V	A		Vishal
4	Shriyas. J	BCA	V	B		Shriyas
5	Mahesh. C	BCA	V	'B'		Mahesh
6	BANUPRAKASH	BCA	V	B		Banuprakash
7	Harsavardhana. R	BCA	V	'B'		Harsavardhana
8	PRATHAP . P	BCA	Vth	'B'		Prathap
9	Pavan. G	BCA	Vth	B		Pavan
10	Himanshu Prasad . J	BCA	Vth	B		Himanshu
11	Fardeen Mehdi	BCA	Vth	B		Fardeen
12	Sachin . M	BCA	Vth	B		Sachin
13	Ashwin Prasad	BCA	Vth	B		Ashwin
14	Abinash Das	BCA	Vth	B		Abinash
15	SHASHANK B.S	-/-	-/-	A		Shashank
16	R. Rohith	BCA	Vth	B		Rohith
17	Tejawi . B	BCA	Vth	B		Tejawi
18	Shashank. M.S Gowda	BCA	Vth	B		Shashank
19	Gowtham. B	BCA	Vth	B		Gowtham
20	AKASH KP	BCA	Vth	A		Akash
21	Rohan MP	BCA	Vth	A		Rohan
22	AKASH Gowda SG	BCA	Vth	A		Akash
23	Vinay BV	BCA	Vth	A		Vinay
24	VARUN KOMAR ST	BCA	Vth	A		Varun
25	Prakrithi. S. B	BCA	Vth	B		Prakrithi

Total No. of Students Attended: 25


PRINCIPAL

Signature of the Teacher In charge:  Bhagyalakshamma Ballehalli Remana
Organizing Secretary
Mahajana First Grade College (Autonomous)
Jayalakshmipuram, Mysuru-570 012

Name: SUNITHA . N
Preethi . M
Preethi . M

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Attendance Sheet

Name of the Committee: BCA with IQAC

Date: 2/2/2023


Name of the Programme: Interactive Session on Data Visualization in R programming

Time: 11:30 to 1:30pm

Sl. No.	Name of the Student	Course	Semester	Section	Combination	Signature
1	Srujan. A	BCA	V th	B	-11-	Srujan
2	Mohammed Abrar	BCA	V th	B	-11-	Abrar
3	Harshitha Kumari S	BCA	V th	B	-11-	Harshitha
4	Pranav. K	BCA	V th	B	-11-	Pranav
5	Hanisha R	BCA	V th Sem	B	-11-	Hanisha
6	Jayun. M. S	BCA	V th Sem	A	-11-	Jayun
7	Sulayman Ahmed Skaniff	BCA	V Sem	A	-11-	Sulayman
8	TRAVIS QILANG HUY	BCA	V Sem	A	-11-	Travis
9	Priyatharika T	BCA	V Sem	A	-11-	Priyatharika
10	Chavan. I	BCA	V Sem	A	-11-	Chavan
11	Vivek. H. B	BCA	V Sem	B	-11-	Vivek
12	Donabhan. G. S.	BCA	V Sem	B	-11-	Donabhan
13	Kishan. A	BCA	V Sem	B	-11-	Kishan
14	Preetham ganada H.D	BCA	V Sem	A	-11-	Preetham
15	Krishnamurthy S.P	BCA	V Sem	A	-11-	Krishnamurthy
16	Praywal. P	BCA	V Sem	B	-11-	Praywal
17	Nithin P. M	BCA	V Sem	B	-11-	Nithin
18	Purnith. M. J	BCA	V Sem	B	-11-	Purnith
19	Aarjan bharadwaj	BCA	V Sem	B	-11-	Aarjan
20	Shanmuga. Y	BCA	V Sem	A	-11-	Shanmuga
21	Ashwinak. K. M	BCA	V Sem	A	-11-	Ashwinak
22	Vikrath	BCA	V Sem	A	-11-	Vikrath
23	Aarav. K	BCA	V Sem	A	-11-	Aarav
24	Lokesh. K. K	BCA	V Sem	A	-11-	Lokesh
25	Zalvi	BCA	V Sem	A	-11-	Zalvi

Total No. of Students Attended: 25


PRINCIPAL

Signature of the Teacher In charge: 
Signature

Organizing Secretary
Smt. Binayalakshamma
Mahajana First Grade College (Autonomous)
Jayalakshmpuram, Mysuru-570 012

Name: SUNITHA N
Preetham. M
Purnith. M

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Jayalakshampuram, Mysuru - 570 012

Attendance Sheet

Name of the Committee: BCA with IQAC

Date: 02/10/2023

Name of the Programme: Interactive Session on Data Visualization & Regression in R Prog

Time: 11:30 - 1:30 pm

Sl. No.	Name of the Student	Course	Semester	Section	Combination	Signature
1	Anupa P.C	BCA	V	A	BCA	[Signature]
2	Sandeep gauda B.m	BCA	V	A	BCA	[Signature]
3	Shriganth S. Gowda	BCA	V	A	BCA	[Signature]
4	Deepan R	BCA	V	A	BCA	[Signature]
5	Abhishek K. K. S	BCA	V	A	BCA	[Signature]
6	Abhishek M.V	BCA	V	A	BCA	[Signature]
7	Charan H.S	BCA	V	A	BCA	[Signature]
8	Chakrath Kumar M	BCA	V	A	BCA	[Signature]
9	Srinanth L.B	BCA	V	A	BCA	[Signature]
10	Yashwanth B.K	BCA	V	B	BCA	[Signature]
11	Samarth	-11-	-11-	B	-11-	[Signature]
12	VENUPRASAD Y	-11-	V	A	BCA	[Signature]
13	MANOJ V	-11-	V	A	BCA	[Signature]
14	Harsha G.S	-11-	V	B	BCA	[Signature]
15	Chidamb M.D	-11-	V	B	BCA	[Signature]
16	Santhosh Gujjar	-11-	V	B	BCA	[Signature]
17						
18					PRINCIPAL	
19					San. Bhonyalshamma Rattahalli Ramappa	
20					Mahajana First Grade College (Autonomous)	
21					Jayalakshampuram, Mysuru-570 012	
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Total No. of Students Attended: 16

Signature of the Teacher In charge: [Signature]

Organizing Secretary

Signature

Name: SUNITHA.N

Pooethu.M

Pooethu.M