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# SJMINSTITUTEOFTECHNOLOGY

**NH-4Bypass, P.B.No:73,CHITRADURGA-577502,Karnataka.**

## INSTITUTION'SINNOVATIONCOUNCIL(IIC)

## Overall Report
## of
## *Two DaysWorkshop*

## *On*

## *"Data Analytics using Python"*

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# S J M INSTITUTE OF TECHNOLOGY

**(Recognized by AICTE, New Delhi and Affiliated to Visvesvaraya Technolgical University, Belagavi)**

NH-4 Bypass, P.B.No:73, CHITRADURGA -577502, Karnataka State

## Dept of Electronics and Communication Engineering
*in association with*
## IQAC ,IIC& Abeyaantrix Softlab Pvt Ltd
*Organizing*

TWO DAYS HANDS ON WORKSHOP ON

# *DATA ANALYTICS USING PYTHON*

| *Coordinators* | *IQAC Coordinator* | *IIC convenor* | *HOD* | *Principal* |
|---|---|---|---|---|
| *Prof. Usman Ali A R* | *Dr.Jagannath N* | *Dr. Krishnareddy  K R* | *Dr.Siddesh K B* | *Dr.Bharath P B* |
| *Prof. Tanuja T* | | | | |
| *Prof. Sudharshan M K* | | | | |

*Venue: EC Seminar Hall*                    *Date: 15th & 16th of Feb 2024*

*Topic: Two Days Hands on Workshop on "Data Analytics using Python"*

**Theme:** **Providing knowledge about Data Analytics using Python**

## Objectives of the Event:

1. To provide participants with a comprehensive understanding of the process involved in Data Analytics using python.

2. To inspire attendees by showcasing successful demonstrating data analytics using python, the feasibility and potential of python for the data analytics.

3. To offer practical insights into the challenges and opportunities encountered during the data analytics using python to make informed decisions and navigate potential obstacles.

4. To create a platform for data analytics among participants, mentors, and successful information from the data obtained using python.

*Speaker:* Mr. Mantesh B Shirur& Mr. Mallesh, Senior software Engineer, Abeyaantrix Soft lab Pvt Ltd, Bangalore

*Speaker Profile:*

### Experience Summary:

- Worked as Embedded trainer at Space Development Nexus,Delhi.

- Worked as Embedded trainer in Lucknow Innovation lab,Lucknow.

- Working as Senior software Engineer at Abeyaantri Softlab OPC Pvt Ltd, Bangalore from August 2018 to till date.

- Training delivery to various Corporates as well as in-house training delivery to students on various platforms such as data analytics using python, MATLAB/SIMULINK, Electrical circuit Simulation, Robotics, PLC, VFD, HMI, Embedded system etc.

- Conducted Workshops and SDP's at various Indian Engineering Colleges.

- A team player with good communication skills, Quick Learning ability, Adaptability to change, hardworking and self-motivated.

**Skill Summary:**

- Delivered training and workshops to engineering colleges and Corporates in India which includes colleges like JIT Davanagere, UBDT, BIET Davanagere, STJITRanebennur, SJMIT Chitradurga, Govt Engineering college, SIT Tumkur, HMSIT Tumkur, HSIT Belagumand corporates like Sparx Crew Technologies U.P, TechEx Engineers Lucknow, SDNx Delhi.

- Algorithm and projects development based on Python,MATLAB/SIMULINK.

- Conducted Special training programs on Python, Electrical Circuit Simulation using MATLAB/SIMULINK, Simscape electrical library and SimPower Systems.

- Technical Notes preparation on Python, MATLAB,PLC,Arduino.

## Briefreport oftheevent:

### Introduction:

The Two days hands on workshop on**" Data Analytics using Python"** was organized by the Innovation cell in association with Institution's Innovation Council (IIC), E&C Department and IQAC, with the primary aim of enlightening engineering students about the critical process of Data Analytics using Python. This theme emphasizes the significant role each one of us plays in to inspire individuals to make conscious changes in their life that would contribute to promote new technology. The event attracted a diverse audience of engineering students.

### Highlights of the Session:

On 15th February 2024 & 16th February 2024 the session commenced with a warm welcome by the by Prof. Usman Ali A R, Faculty member, IIC, followed by an inaugural address by the Innovation cell Coordinator Dr. Siddesh K B. The importance of fostering Data analytics using Pythonin the engineering field was emphasized. The event lasted from 10:00 a.m. to 1:00 p.m and 2:30 p.m to 5.00 p.m where students actively participated.

Guest of Honour-Mr. Mantesh B Shirur& Mr. Mallesh, Senior software Engineer,AbeyaantrixSoftlabPvt Ltd, Bangalore,Dr.Bharath P B, Dr. Siddesh K B, Prof.& Head, Department

of Electronics & Communication Engineering, Dr. Krishna Reddy, IIC Convener and Prof.Sudharshan M K, Prof. Tanuja T, Programme Coordinator, were present in the session.

Later, the session was taken over by the eminent resource person to deliver his speech on "Data analytics using Python". The primary goal was to empower participants with the ability to analyze and interpret data, enabling them to make informed decisions in their respective fields of study.

**Day 1: Introduction to Data Analytics and Python Basics:**

**Session 1:** Overview of Data Analytics and Introduction to Python for Data Analytics:

The first session provided an overview of data analytics, highlighting its significance in various industries. Participants gained insights into real-world applications and the role of data analytics in decision-making processes. And also introduced the basics of Python programming language, with a focus on elements essential for data analytics. Topics covered included variables, data types, control structures, and functions.

**Session 2:**Hands-On Python Exercises:

Participants engaged in hands-on exercises to reinforce their understanding of Python basics. Exercises were designed to build confidence and familiarity with coding concepts.

**Day 2: Practical Applications of Data Analytics with Python:**

**Session 1:** Data Preprocessing and Data Visualization:

The second day began with a session on data preprocessing, covering techniques such as data cleaning, handling missing values, and normalization. Participants learned how to prepare raw data for analysis. And later, the session delved into data visualization techniques using Python libraries such as Matplotlib and Seaborn. Attendees gained practical experience in creating insightful visualizations to communicate complex data effectively.

**Session 2:** Building a Data Analytics Pipeline:

The final session focused on integrating the skills learned throughout the workshop into a comprehensive data analytics pipeline. Participants worked on a practical case study, applying their knowledge to analyze and interpret a real-world dataset.

A distinguished speaker Mr. Mantesh B Shirur& Mr. Mallesh, highlighting the challenges and opportunities faced during the Data analytics using Python. Key takeaways included the significance

of problem-solving by data analytics using python. An overview of the startup ecosystem, including the role of data analytics and python was provided. Participants gained a better understanding of the data analytics using python.



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The presentation ended with a questions and answers session with the attendees and Prof. Usman Ali A R, Faculty member, IIC, concluded the program by delivering a vote of thanks. About 94 student registered and successfully attended the event.

**Conclusion:**

The Two days hands on workshop on "Data analytics using Python" was a resounding success. It offered valuable insights and practical guidance to engineering students interested in data analytics. Attendees left the event inspired, informed, and equipped with the knowledge and resources needed to transformation in data analytics using python into successful ventures. As a takeaway, participants are encouraged to apply the knowledge gained during the session to initiate and develop data analytics ideas that have the potential to contribute significantly to both the engineering industry

and the broader economy. Future sessions and workshops will continue to nurture the spirit of data analytics among engineering students.

The organizers extend their gratitude to all the speakers, mentors, and participants for making this event a meaningful and enlightening experience. S J M Institute of Technology remains committed to organizing more such events in the future and to providing continuous support and resources to help individuals transform their data analytics using python into successful ventures

# ATTENDANCE DETAILS

Department of Electronics & Communication Engg.
S.J.M.I.T., Chitradurga - 577502
Attendance for workshop on Data analysis

V Sem "A"

| Sl No. | USN | Name | Sign |
|---|---|---|---|
| 1 | 4SM20EC030 | AJAY R | |
| 2 | 4SM21EC002 | ABHISHEK G B | |
| 3 | 4SM21EC003 | AISHWARYA C K | |
| 4 | 4SM21EC004 | AKASH S KADEMANE | |
| 5 | 4SM21EC005 | AKSHA KEERTHANA C A | |
| 6 | 4SM21EC006 | AMBIKA H | Ambika H |
| 7 | 4SM21EC007 | AMULYA K | |
| 8 | 4SM21EC008 | AYISHA SIDDIQA | |
| 9 | 4SM21EC009 | BALAJI B R | Balaji BR |
| 10 | 4SM21EC010 | BHAGYALAKSHMI KAMBALI | bhagyalaxmi. H. kambali |
| 11 | 4SM21EC011 | CHETHAN KUMAR P | |
| 12 | 4SM21EC012 | DEEPIKA D | |
| 13 | 4SM21EC013 | DEEPTHI T R | Deepthi T R |
| 14 | 4SM21EC014 | DEVIKA S | Devika S |
| 15 | 4SM21EC015 | DILEEP R PAWAR | Dileep R Pawar |
| 16 | 4SM21EC016 | DIVYA B S | Divya.BS |
| 17 | 4SM21EC018 | HARSHA B K | |
| 18 | 4SM21EC019 | HARSHITHA B | NP |
| 19 | 4SM21EC020 | HARSHITHA G K | |
| 20 | 4SM21EC021 | HEMA B T | |
| 21 | 4SM21EC022 | HIMA J | Hima J |
| 22 | 4SM21EC023 | JAGADISH R | Jagadish R |
| 23 | 4SM21EC024 | JYOTHIBAI S | Jyothibai S |
| 24 | 4SM21EC025 | KARTHIK L G | |
| 25 | 4SM21EC026 | LIKHITH K J | NP |
| 26 | 4SM21EC027 | MANUPRIYA P | Manupriya.P |
| 27 | 4SM21EC028 | MATHURA YADAV P V | |
| 28 | 4SM21EC030 | MOINUDDIN T A | |
| 29 | 4SM21EC031 | NANDAN KUMAR V | |
| 30 | 4SM21EC032 | NANDINI M H | |
| 31 | 4SM21EC033 | NAVEEN S T | Naveen ST |
| 32 | 4SM21EC034 | NIDHI V M | |
| 33 | 4SM21EC035 | NIKHITHA P H | |
| 34 | 4SM21EC036 | NITHIN KUMAR K N | |
| 35 | 4SM21EC037 | NITIN D | |
| 36 | 4SM21EC038 | PALLAVI S A | Pallavi |
| 37 | 4SM21EC039 | PARVATHI C M | |
| 38 | 4SM21EC040 | PAVITHRA R | Pavithra.R |
| 39 | 4SM21EC041 | POORNIMA T | Poornima T |
| 40 | 4SM21EC043 | PRUTHVIRAJ G | |
| 41 | 4SM21EC044 | PURUSHOTHAM T P | Purushotham.TP |
| 42 | 4SM21EC045 | RAGHU R | |
| 43 | 4SM21EC046 | RAMYA R | Ramya R. |
| 44 | 4SM21EC047 | ROOPA G D | Roopa.GD |
| 45 | 4SM21EC048 | SANGEETHA M R | Sangeetha MR |
| 46 | 4SM21EC049 | SANIYA B | Saniya. |
| 47 | 4SM21EC050 | SATHISH H | Sathish.H |

Head of the Dept,
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| | | | Student contact num | K. S |
|---|---|---|---|---|
| 1 | 4SM21EC051 | SATHISHA K | | |
| 2 | 4SM21EC052 | SHAILENDRA S | Shail | |
| 3 | 4SM21EC053 | SHIVANANDA GOWDA B | Shivanand Gwad B | |
| 4 | 4SM21EC054 | SNEHA B | St. B | |
| 5 | 4SM21EC055 | SNEHA M | St. M | |
| 6 | 4SM21EC057 | SUHAS P M | PM | |
| 7 | 4SM21EC058 | SUJITH G R | Sujith . GR | |
| 8 | 4SM21EC059 | SUNIL R | R | |
| 9 | 4SM21EC060 | TANUSHREE S | tanshas | |
| 10 | 4SM21EC061 | THANUSHREE K V | Thanushree. b. V | |
| 11 | 4SM21EC062 | THANUSHREE M | Thanushree. M. | |
| 12 | 4SM21EC063 | VAISHNAVI M M | Vaishnavi MM | |
| 13 | 4SM21EC064 | VARSHA D | Varsha D | |
| 14 | 4SM21EC066 | VINAY M S | . M S | |
| 15 | 4SM21EC067 | YASHASWINI H M | Yashaswini Hm | |
| 16 | 4SM21EC068 | YASHAWANTH M | Yash | |
| 17 | 4SM21EC069 | ZAIBA BANU Z | Zaiba | |
| 18 | 4SM22EC400 | AMEER AHAMED | | |
| 19 | 4SM22EC401 | ANUSHA C | Anusha C | |
| 20 | 4SM22EC402 | ANUSHA S Y | Anusha S Y | |
| 21 | 4SM22EC403 | AYESHA SIDDIQA A | Ayesha. | |
| 22 | 4SM22EC404 | CHANDAN M L | Chandan ML | |
| 23 | 4SM22EC405 | CHANDANA U | Chandana. U | |
| 24 | 4SM22EC406 | DADHAM NIKHITHA | Nikhitha.D | |
| 25 | 4SM22EC407 | DEEPIKA T R | Deepika T.R | |
| 26 | 4SM22EC408 | GAGAN H R | Gagan. H R | |
| 27 | 4SM22EC409 | GANESH V | | |
| 28 | 4SM22EC410 | KARTHIK N | Karthik.N | |
| 29 | 4SM22EC411 | KAVYA P | Kavya.P | |
| 30 | 4SM22EC412 | KOUSALYA N | Kousalya.N | |
| 31 | 4SM22EC413 | LOKESHNAIK N V | Lokes | |
| 32 | 4SM22EC414 | MADHUKESHAVA M | Madhu | |
| 33 | 4SM22EC415 | MAHESH V | Mahesh.V | |
| 34 | 4SM22EC416 | MANJUNATHA T | T. Manjunatha | |
| 35 | 4SM22EC417 | POOJA B | Pooja. B | |
| 36 | 4SM22EC418 | PREETHAM Y G | NP | |
| 37 | 4SM22EC419 | PRIYANKA N | Priyanka N | |
| 38 | 4SM22EC420 | RANJITHA A K | Ranjitha. A. K | |
| 39 | 4SM22EC421 | SIDDESH T M | Siddesh | |
| 40 | 4SM22EC422 | SNEHA A | Sneha A | |
| 41 | 4SM22EC423 | SOWMYA B | Sowmya.B | |
| 42 | 4SM22EC424 | SREENIVASA R | Sen Sri R | |
| 43 | 4SM22EC425 | SRINIVASA K R | Srinivasa. KR | |
| 44 | 4SM22EC426 | SUFIYA MUSKAN | Sufiya Muskan | |
| 45 | 4SM22EC427 | USHA R | Usha.R | |
| 46 | 4SM22EC428 | VASANTH V | Vasanth | |
| 47 | 4SM22EC429 | ZUVERIYA M | Zuveriya | |

Head of the Dept,
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**Photographs of the Event:**



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# MEDIA COVERAGE

# ಎಸ್‌ಜೆಎಂನಲ್ಲಿ ಕಾರ್ಯಾಗಾರ

**ಚಿತ್ರದುರ್ಗ:** ಆಧುನಿಕ ತಂತ್ರಜ್ಞಾನವು ನಾನಾ ಕ್ಷೇತ್ರಗಳಲ್ಲಿನ ಸಮಸ್ಯೆಗಳನ್ನು ಸರಳವಾಗಿ ಬಗೆಹರಿಸಲು ಸಹಕಾರಿಯಾಗಿದೆ ಎಂದು ಎಸ್‌ಜೆಎಂಐಟಿ ಪ್ರಾಚಾರ್ಯ ಡಾ.ಪಿ.ಬಿ.ಭರತ್ ತಿಳಿಸಿದರು.

ನಗರದ ಎಸ್‌ಜೆಎಂ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯದಲ್ಲಿ ಎಲೆಕ್ಟ್ರಾನಿಕ್ಸ್‌ ಮತ್ತು ಕಮ್ಯೂನಿಕೇಷನ್ ವಿಭಾಗದಿಂದ ಡಾಟಾ ಅನಲಿಟಿಕ್ಸ್ ಯುಸಿಂಗ್ ಫೈಥಾನ್ ಕುರಿತ 2 ದಿನಗಳ ಕಾರ್ಯಾಗಾರಕ್ಕೆ ಗುರುವಾರ ಚಾಲನೆ ನೀಡಿ, ಮಾತನಾಡಿದರು.

ಎಲೆಕ್ಟ್ರಾನಿಕ್ಸ್ ಮತ್ತು ಕಮ್ಯೂನಿಕೇಷನ್ ವಿಭಾಗದ ಮುಖ್ಯಸ್ಥ ಡಾ.ಕೆ.ಬಿ.ಸಿದ್ದೇಶ್ ಮಾತನಾಡಿ, ಡಾಟಾ ಅನಲೈಸಿಂಗ್ ವಿಧಾನ ಈಗ ಹೆಚ್ಚಿನ ಪ್ರಾಮುಖ್ಯತೆ ಪಡೆದುಕೊಂಡಿದೆ. ವಿದ್ಯಾರ್ಥಿಗಳ ಅನುಕೂಲಕ್ಕಾಗಿ ಈ ಕಾರ್ಯಾಗಾರ ಆಯೋಜಿಸಿದ್ದು ವಿದ್ಯಾರ್ಥಿಗಳು ಇದರ ಸದುಪಯೋಗ ಪಡೆದುಕೊಳ್ಳಿ ಎಂದರು.

ತಂಡದ ವ್ಯವಸ್ಥಾಪಕ ವಿ.ಎಸ್.ಮಲ್ಲೇಶ್, ಸೀನಿಯರ್ ಸಾಫ್ಟ್‌ವೇರ್ ಎಂಜಿನಿಯರ್ ಮಹಾಂತೇಶ್ ಶಿರೂರು, ಪ್ರೊ.ಎಂ.ಕೆ.ಸುದರ್ಶನ್, ಪ್ರೊ.ಟಿ.ತನುಜಾ ಹಾಗೂ ಸಿಬ್ಬಂದಿ ವರ್ಗದವರಿದ್ದರು.



ಚಿತ್ರದುರ್ಗದ ಎಸ್‌ಜೆಎಂಐಟಿ ಕಾಲೇಜಿನ ಎಲೆಕ್ಟ್ರಾನಿಕ್ಸ್ ಮತ್ತು ಕಮ್ಯೂನಿಕೇಷನ್ ವಿಭಾಗದಿಂದ ಡಾಟಾ ಅನಲಿಟಿಕ್ಸ್ ಯುಸಿಂಗ್ ಫೈಥಾನ್ ಕುರಿತ 2 ದಿನಗಳ ಕಾರ್ಯಾಗಾರದಲ್ಲಿ ಭಾಗವಹಿಸಿರುವ ಅಧ್ಯಾಪಕರು, ಅತಿಥಿಗಳು, ವಿದ್ಯಾರ್ಥಿಗಳು.
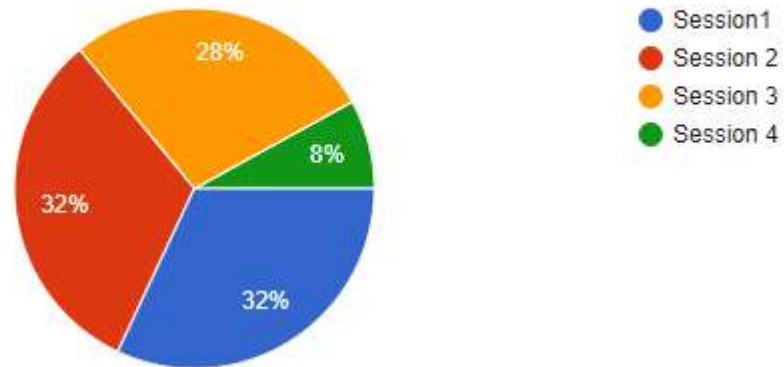
**Key Outcome:**

1. Participants gained a comprehensive understanding of the various stages involved in data analytics aspects.

2. Attendees learned the importance of validating the data analytics using python in the society.

3. They also understood the significance of solving data analytics problems.

4. The session sparked a keen interest in data analytics using python among engineering students.

These outcomes of the session on " Data analytics using Python " encompass the acquisition of essential skills, knowledge, and a strategic approach to validate, refine, and launch data analytics ideas as successful ventures.

**Feedback and analysis:**

Which sessions did you find most relevant?

60 responses



Session1
Session 2
Session 3
Session 4

28%
8%
32%
32%

How satisfied were you with the session content?

60 responses



Poor
Average
Excellent

40%
60%